

NORTH ATLANTIC TOWERS, LLC

and

AT&T

**TECHNICAL REPORT
PROPOSED WIRELESS TELECOMMUNICATION FACILITY**

**64 CODFISH HILL ROAD,
BETHEL CT 06801**



**NORTH ATLANTIC TOWERS, LLC
1001 3rd Avenue West, Suite 420
Bradenton, Florida 34205**



at&t

**New Cingular Wireless PCS, LLC ("AT&T")
500 Enterprise Drive
Rocky Hill, Connecticut 06067**

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Introduction

North Atlantic Towers, LLC ("NAT") and New Cingular Wireless PCS, LLC ("AT&T") hereby submit this Technical Report to the Town of Bethel ("Town" or "Bethel") pursuant to General Statutes §16-50/. NAT proposes to install a wireless telecommunications facility (the "Facility") on an approximately 49 acre parcel located at 64 Codfish Hill Road, Bethel and owned by Claudia Stone (the "Property" or the "Site"). The Facility would consist of a 150 foot monopole structure, with an AT&T antenna array mounted on the tower at a centerline of approximately 146 feet above grade level ("AGL"), and a 20 foot x 12 foot equipment shelter located within the compound area. The tower would also accommodate the antenna arrays of three other wireless carriers. If approved, the Facility would provide wireless communications and the opportunity for improved 911 service in this area of Bethel.

The purpose of this Technical Report is to provide the Town with information concerning the Facility. Section 1 addresses the need for the proposed Facility. Section 2 details the site selection process, including an analysis of other sites considered and rejected by NAT. Section 3 describes the Site, the design of the Facility and the environmental effects, if any, associated with the proposed Facility.

Correspondence and/or communications regarding this Technical Report should be addressed to the attorney for NAT:

Cohen and Wolf, P.C.
1115 Broad Street
Bridgeport, CT 06604
(203) 368-0211

Attention: Julie D. Kohler, Esq.

SECTION 1

Site Justification

The proposed Facility is necessary to allow AT&T to provide wireless service in the Town of Bethel. AT&T is licensed by the Federal Communications Commission ("FCC") to provide wireless communication service throughout the State of Connecticut, including Fairfield County. AT&T's FCC license requires the construction and build-out of its wireless network within its federally licensed service areas, which includes the Town of Bethel.

AT&T has determined that homes, businesses and the public cannot reliably access its network in the eastern area of Bethel, that there are no co-location opportunities available and therefore a new facility must be constructed to provide its wireless services. Coverage provided by the Facility would allow AT&T subscribers to use voice and data services reliably as well as to connect to Emergency 911 services.

The intended coverage area of the Facility includes Codfish Hill Road, Dodgington Road, Putnam Park Road, Sugar Street, Wolfpits Road and Taunton Hill Road. AT&T currently provides coverage to 6.236 square miles of Bethel and the proposed Site would provide coverage to an additional 2.598 square miles, which equates to 15.40% of the total area of Bethel. Additionally, the Facility would enhance the coverage for emergency services in the area. *See attached Radio Frequency Engineering Report dated June 26, 2013.*

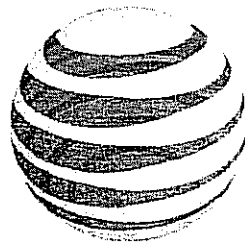
Included in the Radio Frequency Engineering Report are propagation plots prepared by AT&T that depict (1) coverage from existing and approved surrounding sites, and (2) coverage from the proposed Site with an antenna array at a centerline of 146 feet, in conjunction with the existing and approved sites.

Together, these propagation plots demonstrate AT&T's need for a site in the area of the proposed Facility and the effectiveness of the proposed Facility in meeting the need for wireless service in this area of Bethel.



RADIO FREQUENCY ENGINEERING REPORT

**Proposed Bethel, CT Wireless Facility -
S1804 - Bethel, CT**



at&t

Prepared by:

SAI Communications
260 Cedar Hill Street
Marlborough, MA 01752
Desk: (508) 573-5408
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Revision Date:

June 26, 2013

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Overview

This document is provided in support of AT&T's proposal to operate a ground mounted, wireless telecommunication facility in Bethel, CT.

This document addresses AT&T's need for the proposed facility and validates that there are no other existing structures that meet AT&T's coverage objective for this area. The proposed facility located at 64 Codfish Hill Road in the city of Bethel at a proposed antenna centerline height of 146 feet above ground level will best address the coverage objective and provide the needed interconnectivity to AT&T's existing neighboring sites and surrounding communities.

Introduction

As enabled under its Federal Communications Commission ("FCC") Licenses, AT&T seeks to design its wireless network to provide reliable and adequate wireless services to its customers, whether those customers are on the street, in a vehicle, or in a building. Providing reliable and adequate service to its customers in each context is critical for AT&T to provide the quality of wireless service that customers demand, and to meet objectives of Congress that a robust, competitive and low cost wireless communications capacity be developed to serve the entire nation.

In order to build out its network and meet customer demand for voice and data services, AT&T must have in place a system of low power "cell sites" to serve portable wireless communication handsets and mobile telephones. A typical cell site, such as the one proposed, consists of antenna mounted to a building, tower, church or other structure. The antennas are connected to radio operating equipment housed at or near the structure.

To maintain effective, reliable and uninterrupted service, there must be a continuous series of cell sites located within close proximity to each other so as to overlap in a system comparable to a honeycomb pattern. If there is no cell site available to accept/receive the signal, network service to the mobile telephone/data service will terminate involuntarily. Accordingly, the overlap of coverage is necessary for the signal to transfer from one cell to another cell site seamlessly and without involuntary termination.

A number of factors determine the distance between the cell sites, including, but not limited to, topography, physical obstructions, foliage, antenna height, operating frequency and line-of-site.

Coverage Objective

AT&T currently has a couple of existing facilities in Bethel that serve some parts of the city, with additional coverage provided by AT&T cell sites from neighboring town of Newtown.

Map 1, titled, "AT&T Current Coverage without S1804 at Bethel", is a propagation plot that depicts current coverage at Bethel and the neighboring towns. In Map 1 Eastern part of Bethel has marginal or very poor coverage and areas where there is no coverage at all. It also shows that there is inadequate coverage overlap between existing sites CT5511, CT2268 and CT5515.

In the map, "green" ($\Rightarrow -74$ dBm) represents "in-building" coverage which allows for signal penetration losses (solid walls, partitions, etc.) of 10 dB. Color "yellow" represents "in-vehicle" ($\Rightarrow -82$ dBm) which takes into account 5 to 8 dB of vehicle penetration attenuation.

AT&T determined that significant coverage gaps exist particularly in the following roads:

- Codfish Hill Rd., Bethel, CT
- Dodginton Rd., Newtown, CT
- Putnam Park Rd., Bethel, CT
- Sugar St., Newtown, CT
- Wolfpits Rd., Bethel, CT
- Taunton Hill Rd., Newtown, CT

Improving the coverage on above mentioned roads would not only benefit commuters but also provides better signal penetration on houses and other establishments within the area as well. Map 2, titled, "AT&T Proposed Coverage with S1804 at Bethel @ 146' AGL", shows the AT&T coverage at Bethel with the proposed facility turned on. Comparing Map 1 and Map 2, clearly shows the roads mentioned above that will have coverage after adding the proposed site. This would mean better quality and uninterrupted service for subscribers travelling between these roads as well as better signal penetration for houses, business establishments, etc. The following tables will show the area and population in this area that will have service from the proposed facility.

Table 1 below shows the area analysis for current and proposed coverage. AT&T currently covers 6.236 square miles of Bethel and the proposed site will cover an additional 2.598 square miles, a gain of 41.66% relative to current coverage which also equates to 15.40% of the total area of Bethel, CT.

Area Coverage (sq mi)					
Bethel Total Area	Area covered by existing sites ($\Rightarrow -82$ dBm)	Area not covered (< -82 dBm)	Area that will be covered with the proposed site ($\Rightarrow -82$ dBm)	Remaining Area not covered (< -82 dBm)	Proposed Area Gain
16.87	6.236	10.634	8.834	8.036	2.598

Table 2 below shows the population analysis (2008 Census Block Data) for current and proposed coverage. AT&T currently covers 7,150 of Bethel population and the proposed site will cover an additional 2,980, a gain of 41.68% relative to population currently covered which also equates to 15.4% of Bethel total population.

Population Coverage (2008 Census Block Data)					
Bethel Total Population	Population covered by existing sites (=> -82 dBm)	Population not covered (< -82 dBm)	Population that will be covered with the proposed site (=> -82 dBm)	Remaining Population not covered (< -82 dBm)	Proposed Population Gain
19,350	7,150	12,200	10,130	9,220	2,980

Table 3 below shows the roads that will be covered by proposed site with average daily traffic data available from CT DOT website.

Street Name	Average Daily Traffic (2012)
Codfish Hill Rd., Bethel, CT	7,800
Dodgington Rd., Newtown, CT	6,700
Putnam Park Rd., Bethel, CT	4,200
Sugar St., Newtown, CT	4,000
Wolfpits Rd., Bethel, CT	2,200
Taunton Hill Rd., Newtown, CT	1,100

Table 4 below includes AT&T's existing surrounding sites.

Site ID	Longitude	Latitude	Address	Town	State	Structure Type	Antenna
							Centerline (ft)
CTU5182	-73.273599	41.378292	201 SOUTH MAIN STREET	NEWTOWN	CT	MONOPOLE	110
CTU5511	-73.337899	41.389792	8 FERRIS ROAD	NEWTOWN	CT	MONOPOLE	88
CTV2125	-73.374055	41.42552	6 FAIRFIELD DRIVE	NEWTOWN	CT	MONOPOLE	152
CTV2157	-73.424443	41.403409	48 NEWTOWN ROAD	DANBURY	CT	MONOPOLE	100
CTV2268	-73.39658	41.362206	23 SPRING HILL LANE	BETHEL	CT	MONOPOLE	122
CTV5176	-73.401699	41.415792	7 STONY HILL ROAD	BETHEL	CT	UTILITY	145
CTV5178	-73.343899	41.427792	20 BARNABAS ROAD	NEWTOWN	CT	SELF SUPPORT	135
CTV5513	-73.424999	41.360092	11 FRANCIS J CLARKE CIRCLE	BETHEL	CT	MONOPOLE	127
CTV5515	-73.39198	41.339903	4 DITTMAR ROAD	REDDING	CT	SELF SUPPORT	98
S1804	-73.371125	41.374859	64 CODFISH HILL ROAD	BETHEL	CT	MONOPOLE	146

Summary

The significant coverage gap seen on Map 1, demonstrates the need for an additional site within the area. It clearly shows that current coverage does not provide sufficient coverage overlap between the sites within Bethel. In other words, existing sites and facilities will not cover the gap in AT&T's service in this area of Bethel.

Statement of Certification

I certify to the best of my knowledge that the statements in this report are true and accurate.



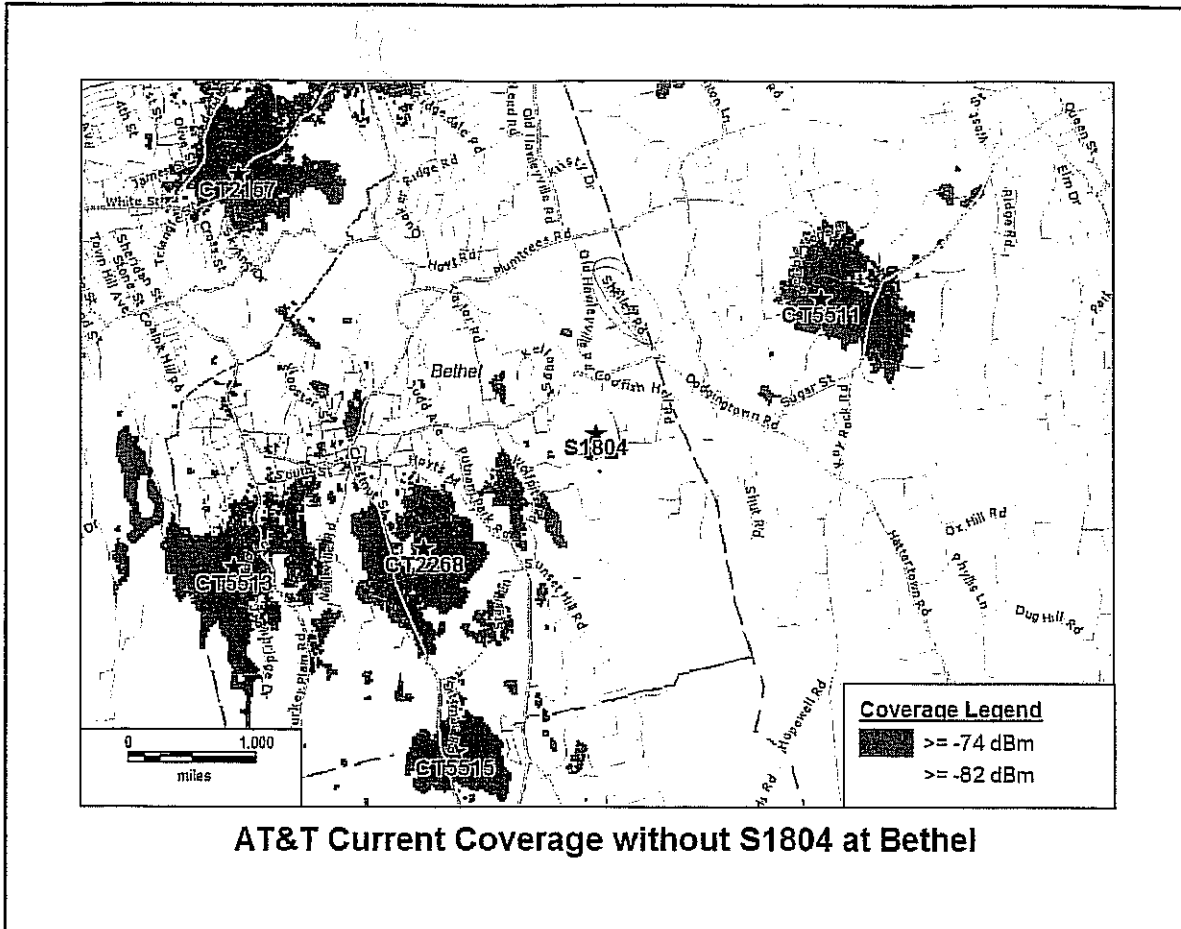
Michael Lawton
SAI Communications

June 26, 2013

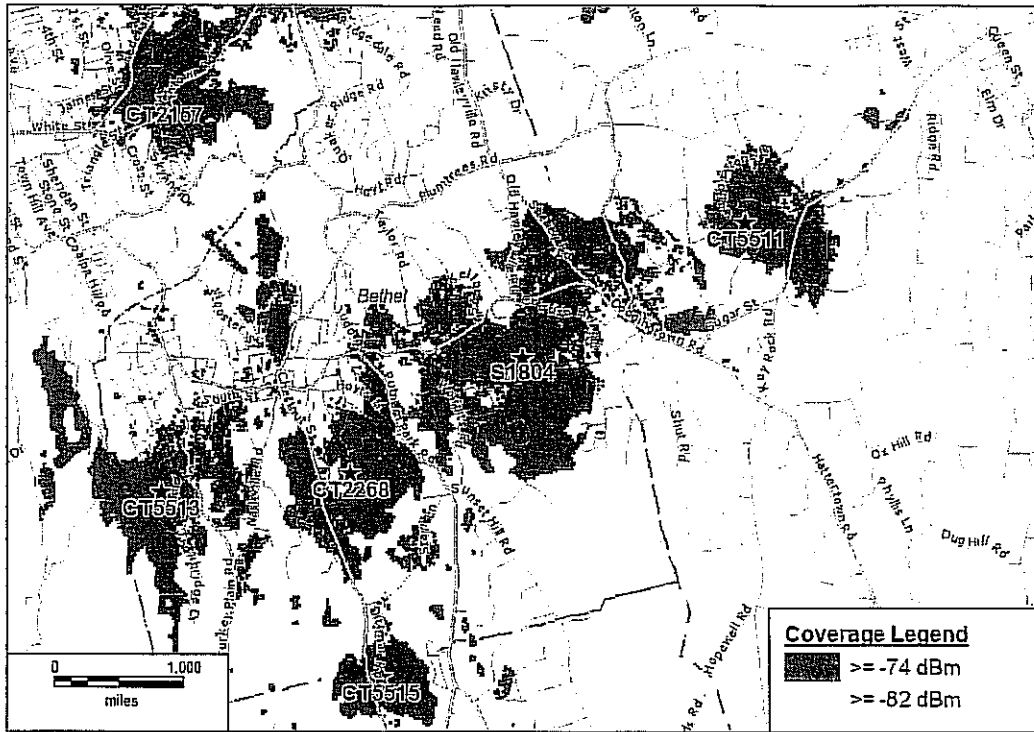
Date

Attachments

Map:1



Map:2



AT&T Proposed Coverage with S1804 at Bethel @ 146' AGL

SECTION 2

Site Search Process and Selection

General Statutes § 16-50i (g) requires NAT and AT&T to provide the Town with a technical report considering, *inter alia*, "the site selection process." When filing its application for a certificate of environmental compatibility and public need with the Connecticut Siting Council, NAT and AT&T must include a statement that describes "the narrowing process by which other possible sites were considered and eliminated." Regs., Conn. State Agencies § 16-50j-74(j). In accordance with these requirements, this Technical Report details the description of the general site search process, the identification of the target search area and the alternative locations considered for development of the proposed Facility.

As a tower infrastructure provider, NAT is in direct consultation with individual carriers and uses its overall knowledge and understanding of existing wireless carrier networks to identify geographical areas where wireless service is unreliable. NAT only pursues a site search for a new tower when it is clear that a new tower facility will be required and all other options have been evaluated and/or exhausted. When conducting a site search, NAT's radiofrequency engineers, in consultation with the appropriate wireless carrier radiofrequency engineers, identify search areas central to the necessary geographical coverage area. In this case, AT&T identified a need for wireless coverage in this area of Bethel, and has agreed to support an application by NAT to construct a new facility in this location to provide the coverage required.

NAT and AT&T are sensitive to State and local desires to minimize the construction of new towers, and it does not pursue development of a new facility where an acceptable existing structure can be found. In general, NAT's site acquisition personnel study the area in and near the search area to determine whether any suitable structure exists. If NAT cannot find a structure with appropriate height and structural capabilities, it turns to industrial and commercial areas or individual parcels that have appropriate environmental and land use characteristics. The list of potential locations is limited by the willingness of property owners to make their properties available for a telecommunications facility. Radio frequency engineers study potentially suitable and available locations to determine whether those locations will meet the technical requirements for a telecommunications facility. The list of possible alternative sites may be further narrowed by NAT's analysis of potential environmental effects and benefits. The weight given to relevant factors varies for each search, depending on the nature of the area and the availability of potential sites.

There are no existing towers, transmission line structures or other suitable structures in this area of Bethel. The nearest towers and suitable structures are already in use by AT&T. Moreover, any other existing towers are too far from the target area to provide coverage specifically to the target area. The closest existing tower is approximately 2.30 miles from the Site. *See attached 4 mile radius Tower Structures*

mapping. Finally, there are no suitable areas of commercial or industrial use in or near the target area.

NAT considered other locations that might host a wireless communications facility to address the coverage gap in this area of Bethel. In doing so, NAT focused on large parcels of property. A map identifying the sites searched by NAT is attached and a description of each site is set forth below:

1. Subject Site

64 Codfish Hill Road

Owner: Claudia Stone

Map 65/Block 57/Lot 122

Lot Size: Approximately 49 acres

This site is the proposed wireless facility location and the subject of this Technical Report

2. Site A

89 Codfish Hill Road

Owner: Joseph Toth

Map 78/Block 55/Lot 42

Lot Size: 15.8 acres

This site was not chosen as the landlord did not want to lease the property. A call was made to the property owner on February 1, 2010 and he advised he was not interested in leasing the property for a wireless communications site. A follow up letter dated February 3, 2010 went to the owner with no response.

3. Site B

67 Codfish Hill Road

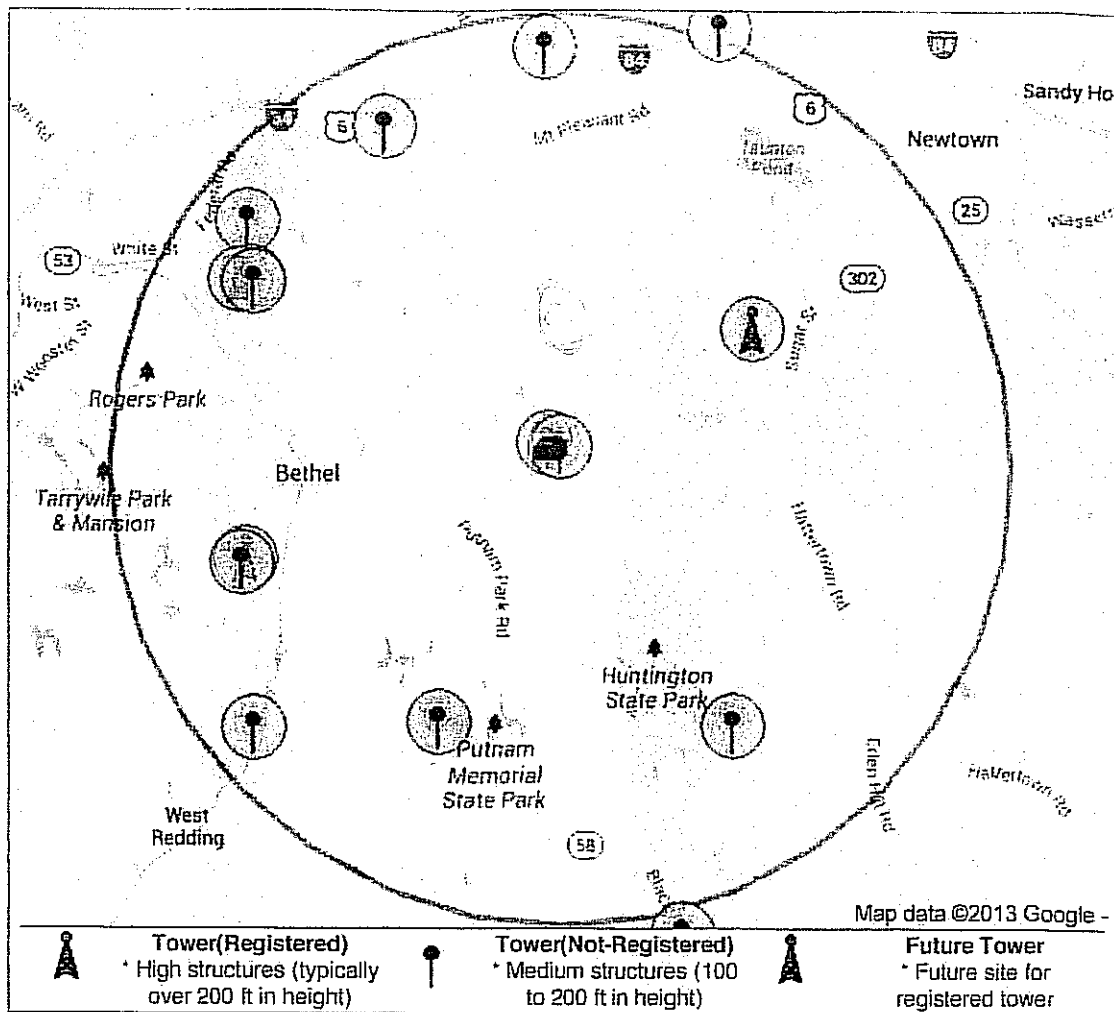
Owner: Menga Family Limited Partnership

Map 78/Block 55/Lot 32

Lot Size: 88 acres

This site was not chosen due to a lack of interest from the owner. A letter dated February 3, 2010 went to the owner with no response.

NAT determined that the subject Site is superior to the other properties in the area. The Property is an approximately 49 acre parcel of land that is densely wooded and set back a substantial distance from any roadway. There are no wetland systems on or near the Site and visibility would be limited.



Tower Search Results



Alert! 16 Towers (3 Registered, 13 Not Registered) found within 4.00 miles of 64 Codfish Hill Rd, Bethel, CT 06801.

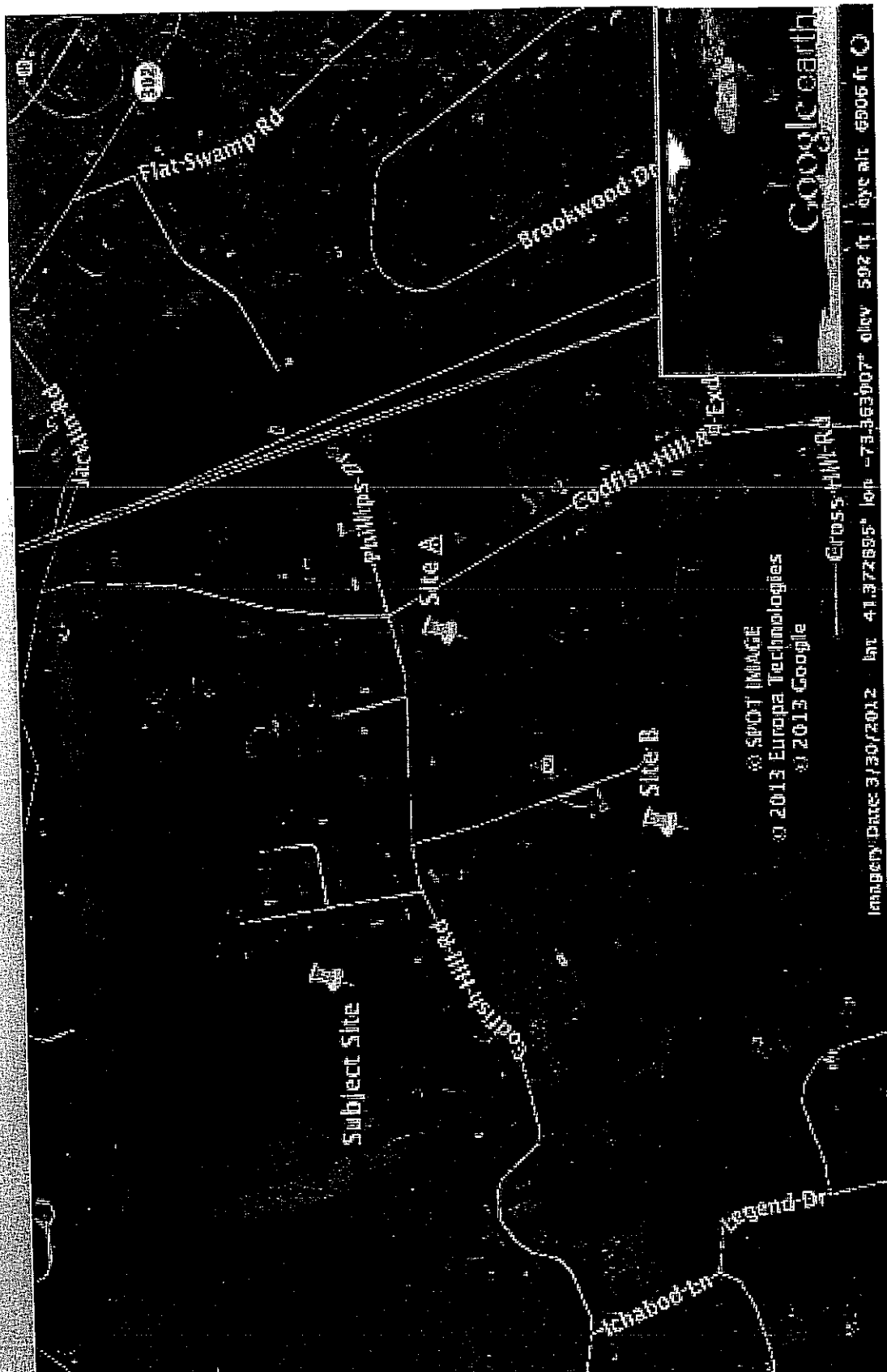


Info! The NEAREST Tower is .18 miles away and is owned by Florida Tower Partners, Llc.



Ok! No Applications for Future Towers detected as of 06/26/13.

Tower Type	ID Num	Site Owner	Height	Dist
	Registered (1)	<u>Sba 2012 Tc Assets, Llc</u>	140 feet	2.30 miles
	(2)	<u>Sba Towers, Llc</u>	170 feet	3.44 miles
	(3)		152 feet	3.74 miles
	Not Registered (1)	<u>Florida Tower Partners, Llc</u>	199 feet	.18 miles
	(2)	<u>Florida Tower Partners, Llc</u>	160 feet	.26 miles
	(3)	<u>Message Center Management</u>	120 feet	2.41 miles
	(4)	<u>Blank</u>	303 feet	2.71 miles
	(5)	<u>Nextel Communications</u>	163 feet	3.32 miles
	(6)	<u>Dane F. Ershen (mc)</u>	167 feet	3.35 miles
	(7)	<u>Nextel Communications</u>	160 feet	3.48 miles
	(8)	<u>Western Connecticut State University</u>	160 feet	3.59 miles
	(9)	<u>Blank</u>	132 feet	3.63 miles
	(10)	<u>Mid-atlantic Paging Co., Inc</u>	113 feet	3.87 miles
	(11)	<u>Sprint-nextel Corporation</u>	180 feet	3.87 miles
	(12)	<u>Nextel Communications</u>	102 feet	3.88 miles
	(13)	<u>Nextel Of New York Inc</u>	95 feet	3.89 miles



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Cross Hill Rd

Imagery Date: 3/30/2012 Lat: 41.372885° Lon: -73.363907° Elev: 592 ft | Day alt: 6906 ft

SECTION 3

PROPOSED SITE AND FACILITY

**64 Codfish Hill Road
Bethel Connecticut 06801**

Map 65/Block 57/Lot 122
49+/- Acres

GENERAL SITE AND FACILITY DESCRIPTION

The Site would be located in the eastern portion of an approximate 49 acre parcel at 64 Codfish Hill Road in Bethel, Connecticut. The Property currently hosts a single family home and a barn structure.

The proposed Facility would consist of a 100 foot x 100 foot lease area and a 75 foot x 75 foot compound area, monopole structure, ground equipment, access and utility routing.

The monopole structure would be 150 feet high with AT&T's antenna array mounted on the tower at a centerline height of 146 feet. The tower would also host the equipment of three additional wireless carriers as well as Town emergency services equipment, if needed.

AT&T's equipment 20 foot x 12 foot equipment shelter and generator would be located within the compound area, with space reserved for the equipment of three additional carriers. The compound area would be surrounded by an eight foot high chain link fence.

Access to the proposed tower would be via a 1,375 foot gravel driveway. Subject to the approval of the utilities, it is anticipated that utility connections would extend from Codfish Hill Road along the access routing.

SITE EVALUATION REPORT

I. LOCATION

- A. COORDINATES: 41°22' 29"
73°22' 16"
- B. GROUND ELEVATION: 595.8' ± AMSL
- C. USGS MAP: Botsford Quadrangle, Connecticut-Fairfield CO, 7.5 minute topographic map, 1969, 41073-C3-TF-024, DMA 6366 IV SE-Series V816
- D. SITE ADDRESS: 64 Codfish Hill Road
Bethel, CT 06801
- E. ZONING CLASSIFICATION: Parcel is zoned R-80

II. DESCRIPTION

- A. SITE SIZE: 10,000 square feet
- B. TOWER TYPE/HEIGHT: 150 foot monopole
- C. SITE TOPOGRAPHY AND SURFACE:
 - i. 5% grade in compound area;
 - ii. 11% grade along access drive; and
 - iii. Thick till surface
- D. SURROUNDING TERRAIN, VEGETATION, WETLANDS, OR WATER:
The existing terrain consists largely of mature wooded area. No wetlands are located in or near the Site.
- E. LAND USE WITHIN ¼ MILE OF SITE: Residential and undeveloped properties.
- F. LOCATION OF ALL SCHOOLS NEAR SITE: The closest schools are located approximately 1.42 miles from the proposed Site. These schools are located at 200 Whittlesey Drive (Berry Elementary School), 400 Whittlesey Drive (Ann H. Rockwell Elementary School), 300 Whittlesey Drive (Bethel High School), 500 Whittlesey Drive (RMT Johnson School – 4th and 5th grades), and 600 Whittlesey Drive (Bethel Middle School).
 - a. Aesthetic impact of Facility on schools: Based upon the Preliminary Viewshed Assessment dated June 21, 2013, the proposed Facility will

be visible, although minimally so, from Bethel High School. As these Bethel schools share the same campus on Whittlesey Drive, it is possible that there may be limited visibility from the other schools as well.

- b. Description of Facility visual mitigation: The Preliminary Viewshed Assessment provides photographs of a tower simulation from 37 locations within a two mile radius area of potential effect. The preliminary determination concluded that of the 37 locations examined, the proposed Facility would only be visible from Bethel High School (and possibly the other schools on the same campus). Further, as is evident from the photograph 10 of the Preliminary Viewshed Assessment, the view from Bethel High School is significantly limited. Based upon the results of the Preliminary Viewshed Assessment and natural visual mitigation provided by the wooded nature of the Property, no additional visual mitigation is proposed at this time.

III. FACILITIES

- A. POWER COMPANY: CL&P
- B. POWER PROXIMITY TO SITE: Existing utility pole 1375 feet southwest of proposed Facility.
- C. TELEPHONE COMPANY: AT&T
- D. PHONE SERVICE PROXIMITY: Existing utility pole 1375 feet southwest of proposed Facility.
- E. VEHICLE ACCESS TO SITE: Access to the proposed tower would be across a proposed gravel drive.
- F. OBSTRUCTION: None
- G. CLEARING AND FILL REQUIRED: The total area of disturbance would be 47,620 square feet. The Facility would require 625.53 cubic yards of cut and 405.25 cubic yards of fill. Approximately 41 trees will need to be removed for site access and construction.

IV. LEGAL

- A. PURCHASE [] LEASE [X]
- B. OWNER: Claudia Stone
- C. ADDRESS: 64 Codfish Hill Road, Bethel, Connecticut 06801
- D. DEED ON FILE AT: Volume 992/ Page 127 and Volume 514/Page 619

FACILITIES AND EQUIPMENT SPECIFICATIONS (TOWER & EQUIPMENT)

I. TOWER SPECIFICATIONS

- A. MANUFACTURER: TBD
- B. TYPE: Monopole
- C. HEIGHT: 150'
- D. DIMENSIONS: TBD

II. TOWER LOADING

A. AT&T

- 1. MODEL: TBD
- 2. DIMENSIONS: TBD
- 3. ANTENNAS: 12 (twelve) antennas on a low profile mount
- 4. TOWER POSITION: 146 AGL to the center of the antenna array
- 5. TRANSMISSION LINES: TBD

B. FUTURE CARRIERS – 3 additional carriers

III. ENGINEERING ANALYSIS AND CERTIFICATION:

All work shall be in accordance with the 2003 International Building Code as modified by the 2009 Connecticut supplement, including the TIA/EIA-222 revision "F" "structural standards for steel antenna towers and supporting structures." 2005 Connecticut Fire Safety Code and 2009 amendments, National Electrical Code and local codes. The foundation design will be based on soil conditions at the site.

ENVIRONMENTAL ASSESSMENT STATEMENT

I. PHYSICAL IMPACT

A. WATER FLOW AND QUALITY

No water flow and/or water quality changes are anticipated as a result of the construction or operation of the Facility. The construction, operation and maintenance of the Facility would not adversely impact any wetlands. There are no existing wetlands on or near the Site and the Site is not within a 100 year flood zone. See *attached Natural Resource Review dated June 27, 2013*. NAT would implement Best Management Practices during construction to control storm water and erosion.

B. AIR QUALITY

Under ordinary operating conditions, the equipment that would be used at this Facility would emit no air pollutants of any kind. For limited periods during power outages, a generator will be utilized.

C. LAND

Clearing and grading would be required for development of the proposed Site. See *the Site Evaluation Report, supra*. The remainder of the Property would remain unchanged by the construction and operation of the Site.

D. NOISE

The Facility equipment after construction would not emit any noise other than the installed heating, air conditioning, ventilation systems, and in the event of a power outage, the proposed self-contained diesel generator. Some noise is anticipated during Facility construction, which is expected to take approximately ten weeks.

E. POWER DENSITY

The worst-case calculation of power density for operation of AT&T's antennas at the Facility would be approximately 6.47% of the applicable FCC/ANSI standards. See *attached RF Power Density Calculations dated March 29, 2013*.

F. VISIBILITY

The Preliminary Viewshed Report provides photographs of a tower simulation from 37 locations within a two mile radius area of potential effect. The preliminary determination concluded that of the 37 locations examined, the proposed Facility would only be visible from Bethel High School. *See attached Preliminary Viewshed Report dated June 27, 2013.* The Preliminary Viewshed Map will be filed under separate cover.

II. SCENIC, NATURAL, HISTORIC & RECREATIONAL VALUES

NAT has retained EBI Consulting ("EBI") to evaluate the Facility in accordance with the FCC's regulations implementing the National Environmental Policy Act of 1969 ("NEPA"). Once EBI completes the NEPA report, NAT will file the report with the application for Certificate of Environmental Compatibility and Public Need. EBI, however, has issued a preliminary determination that the proposed Facility will not implicate most of the criteria outlined in § 1.1307(a) of the NEPA (tribal consultation and SHPO still pending). Further, the proposed Facility is projected to have no effect on protected species, is not located within the boundaries of (or within one mile of) federally protected land, will have no impact on wetlands, and is not anticipated to result in a significant change to surface features. *See attached NEPA Screening Checklist and Natural Resources review dated June 27, 2013.*

Natural Resource Review

June 27, 2013

RE: Proposed Telecommunications Facility
Site Identifier: CT 1155C / Bethel CT
Site Address: 64 Codfish Hill Rd., Bethel, Fairfield County, CT 06801
Latitude / Longitude: 41° 22' 29" / 73° 22' 16"
EBI Project No. 61133025

EBI Consulting (EBI) has prepared the following Natural Resource Review (the Review) for the above-referenced property (herein, the Subject Property). This Review was completed as a part of EBI's National Environmental Policy Act (NEPA) review of the proposed telecommunications facility, and focused on identifying potential impacts to federally-protected land, protected species, flood zones and wetlands, which may require further environmental review per Federal Communications Commission (FCC) Rules Implementing NEPA [47 CFR 1.1307(a).]

Please note that EBI prepared this Review using only readily-available online resources and visual observations made during EBI's site walk at the Subject Property on June 18, 2013. The weather was partly cloudy and approximately 75 degrees. In lieu of a jurisdictional determination wetland or species survey, this Review is designed to provide baseline evaluation of the potential for the proposed installation to affect on-site natural resources (including protected species) and to determine if additional review, on-site surveys, or consultation is required.

PROJECT SUMMARY

As of the date of this Review, Tarpon Towers, LLC proposes to construct a new telecommunications facility. The proposed facility will consist of a 150 foot monopole, equipment shelter and equipment cabinets within a fenced compound on a 100 foot by 100 foot lease area. Tarpon Towers, LLC plans to improve approximately 1300 feet access road, an agricultural equipment drive, from Codfish Hill Road to the tower area. Utilities will follow the proposed access road. Please see the attached site drawings for complete details.

PROPERTY AND VICINITY DESCRIPTION

The Subject Property is an approximately 49.85-acre parcel, consisting of a dwelling, a garage, and unimproved land. The area of the proposed installation (herein, the Project Site), currently consists of undeveloped, wooded land.

Land immediately to the north, south, east, and west of the Project Site consists of undeveloped and residential properties.

FEDERAL LANDS REVIEW

EBI reviewed available online resources to determine if the proposed telecommunications facility is located within one mile of certain federally-protected lands. The following table outlines EBI's review.

FEDERALLY-PROTECTED LAND Jurisdictional Agency / Resource	Within Boundary / Within One Mile	
	YES	NO
Wilderness Area [47 CFR §1.1307(a)(1)] National Wilderness Preservation System (NWPS) National Park Service (NPS); U.S. Forest Service (USFS); U.S. Fish and Wildlife Service (USFWS); Bureau of Land Management (BLM) http://www.wilderness.net/index.cfm?fuse=NWPS	<input type="checkbox"/>	<input checked="" type="checkbox"/>

FEDERALLY PROTECTED LAND Jurisdictional Agency / Resource	Within Boundary / Within One Mile	
	YES	NO
Wildlife Preserve [47 CFR §1.1307(a)(2)] National Wildlife Refuge System (NWRS) NPS; USFS; USFWS; BLM http://www.fws.gov/refuges	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wild & Scenic Rivers NPS; USFS; USFWS; BLM http://www.rivers.gov	<input type="checkbox"/>	<input checked="" type="checkbox"/>
National Scenic Trail NPS and Managing Systems and Trails Organization (MSTO) http://www.nps.gov/nrcr/programs/nts/nts_trails.html	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Comments: None		

Additionally, a review of federal lands mapping (www.nationalatlas.gov) and information provided by the client, the proposed telecommunications facility is not located on land currently under the jurisdiction of another federal agency.

PROTECTED SPECIES REVIEW

EBI reviewed online resources maintained by the USFWS (<http://ecos.fws.gov/ipac>) to identify any federally-listed threatened and endangered species that are known to occur within the project area. Based on EBI's research of online files maintained by the USFWS, no federally-protected (i.e. endangered or threatened) are known to occur within the project area.

Additionally, based on a review of the USFWS online Critical Habitat Portal (<http://criticalhabitat.fws.gov>), no critical habitats were identified within the immediate proximity of the proposed telecommunications facility.

EBI also reviewed online resources maintained by the Connecticut Department of Energy and Environmental Protection (<http://www.depdata.ct.gov/naturalresources/endangeredspecies/nddbpdfs.asp>) to identify any state-protected species that are known to occur within proximity of the proposed Project Site. Based on EBI's review of these online resources, no state-listed species are known to occur within the immediate proximity of the proposed Project Site.

Additional Considerations

Tarpon Towers, LLC should take into consideration potential impacts to migratory bird species protected under the MBTA and the Endangered Species Act during development and operation of the proposed telecommunications facility. On September 14, 2000, the USFWS established the *Service Interim Guidelines for Recommendations on Communications Tower Siting, Construction, Operation, and Decommissioning* (Interim Guidelines). The USFWS Interim Guidelines are considered voluntary federal recommendations; however, EBI recommends that Tarpon Towers, LLC review the USFWS Interim Guidelines (http://www.fws.gov/habitatconservation/com_tow_guidelines.pdf) in their entirety in order to avoid potential adverse impacts to migratory birds.

The proposed tower will be a 150-foot self-supported (i.e. no guyed wires) with no lighting. As such, it meets most of the USFWS's tower siting and design recommendations and is therefore not anticipated to adversely affect migratory birds.

FLOOD ZONE REVIEW

Based on EBI's review of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (www.fema.gov) for the proposed Project Site (Community Map 090001, Panel 255F) is located within an area identified as Zone X, and therefore is not located within a 100-year floodplain.

WETLANDS REVIEW

EBI reviewed the USFWS National Wetlands Inventory (NWI) map depicting the Project Site and immediate vicinity (see attached). The NWI map depicts no wetlands in the immediate vicinity of the Project Site. Further, EBI did not observe any readily identifiable wetlands or wetland characteristics (e.g. standing water, hydrophytic vegetation) at the Project Site or within its immediate proximity.

EBI also reviewed the United States Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS) Web Soil Survey (WSS) for the Project Site and immediate vicinity. According to EBI's review, soils at the Project Site consist of the soils in the table below. These soils are not listed as hydric by the NRCS (<http://soils.usda.gov/use/hydric/>).

State of Connecticut (CT600)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
46B	Woodbridge fine sandy loam, 2 to 8 percent slopes, very stony	0.4	17.1%
73C	Charlton-Chatfield complex, 3 to 15 percent slopes, very rocky	0.5	20.9%
75E	Hollis-Chatfield-Rock outcrop complex, 15 to 45 percent slopes	0.5	19.5%
84B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes	0.8	32.3%
84D	Paxton and Montauk fine sandy loams, 15 to 25 percent slopes	0.3	10.3%
Totals for Area of Interest		2.5	100.0%

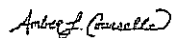
FINDINGS AND CONCLUSIONS

Based on the results of EBI's review as summarized herein, the proposed telecommunications facility is anticipated to have 'no effect' on protected species.

Further, the proposed telecommunications facility is (i) not located within the boundaries of, or within one mile of federally-protected land (i.e. wildlife preserves, wilderness areas, etc.); (ii) not located within a 100-year flood zone; and (iii) not anticipated to result in a significant change to surface features (e.g. wetlands fill). As such, EBI recommends no further review with regard to these natural resources.

EBI is an independent contractor, not an employee of either the property owner or the project proponent, and its compensation was not based on the findings or recommendations made in this Review or on the closing of any business transaction.

Sincerely,



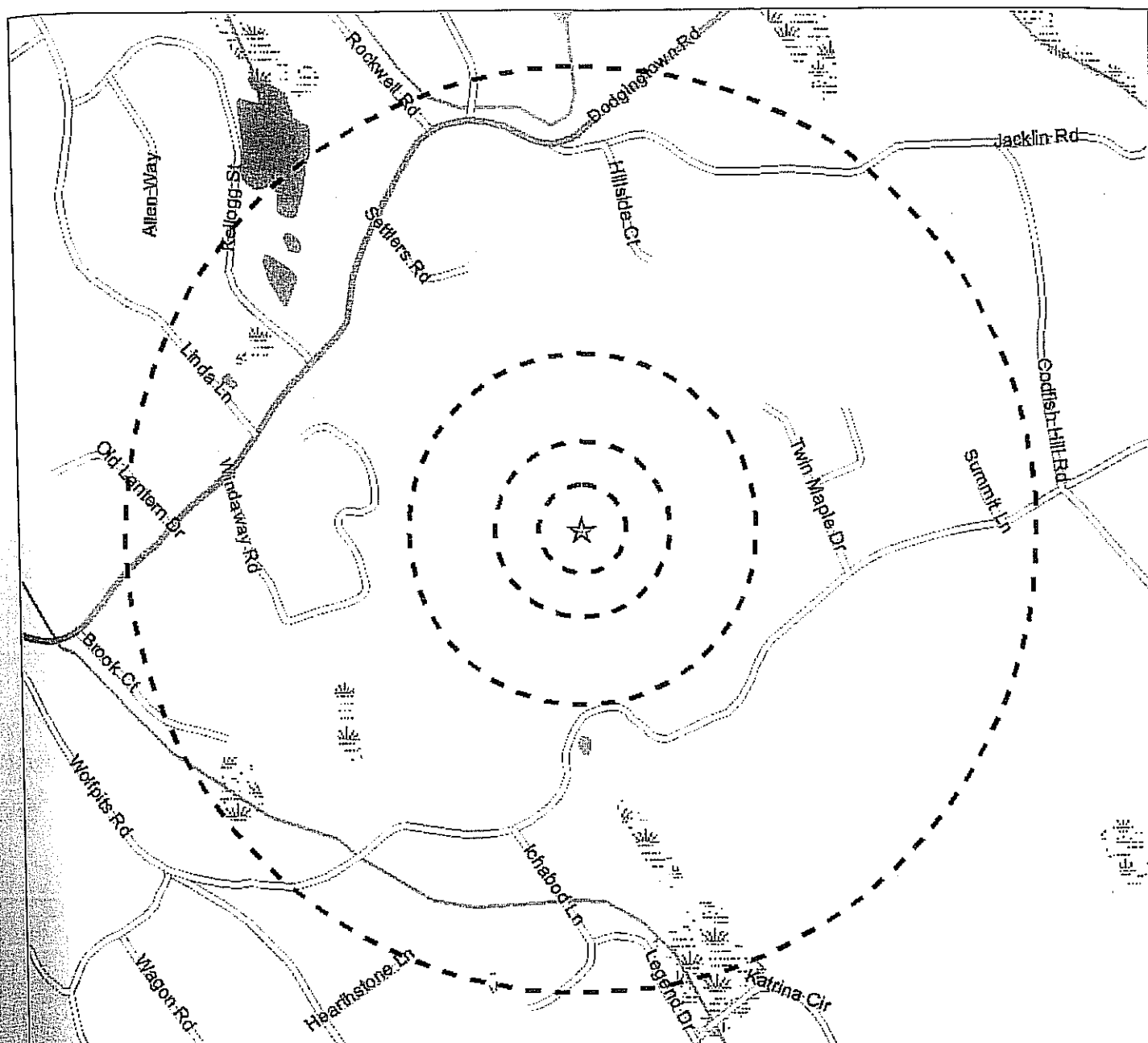
Amber Courselle
Architectural Historian



Richard Bolton
Wetland Scientist

Attachments: Figures & Drawings
 Photographs
 Species Review Documentation
 Supporting Documentation
 Qualifications

FIGURES & DRAWINGS



Legend

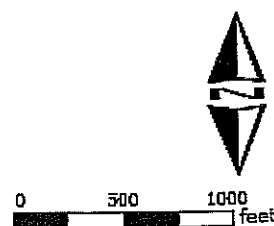
★ Project Site [---] Site Buffer at 250', 500', 1000' and 1/2 mile

Source: Selected data from ESRI, EBI and NWI

Figure 1 - Site Location Map

CT 1155C/Bethel CT
64 Codfish Hill Rd
Bethel, CT 06801

PN 01133025

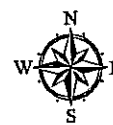




Legend

- ★ Selected Project Site
- Site Radius at 250', 500', 1000' & 1/2 mile

Source: Selected data from USGS and EBI.



0 500 1,000 2,000 Feet

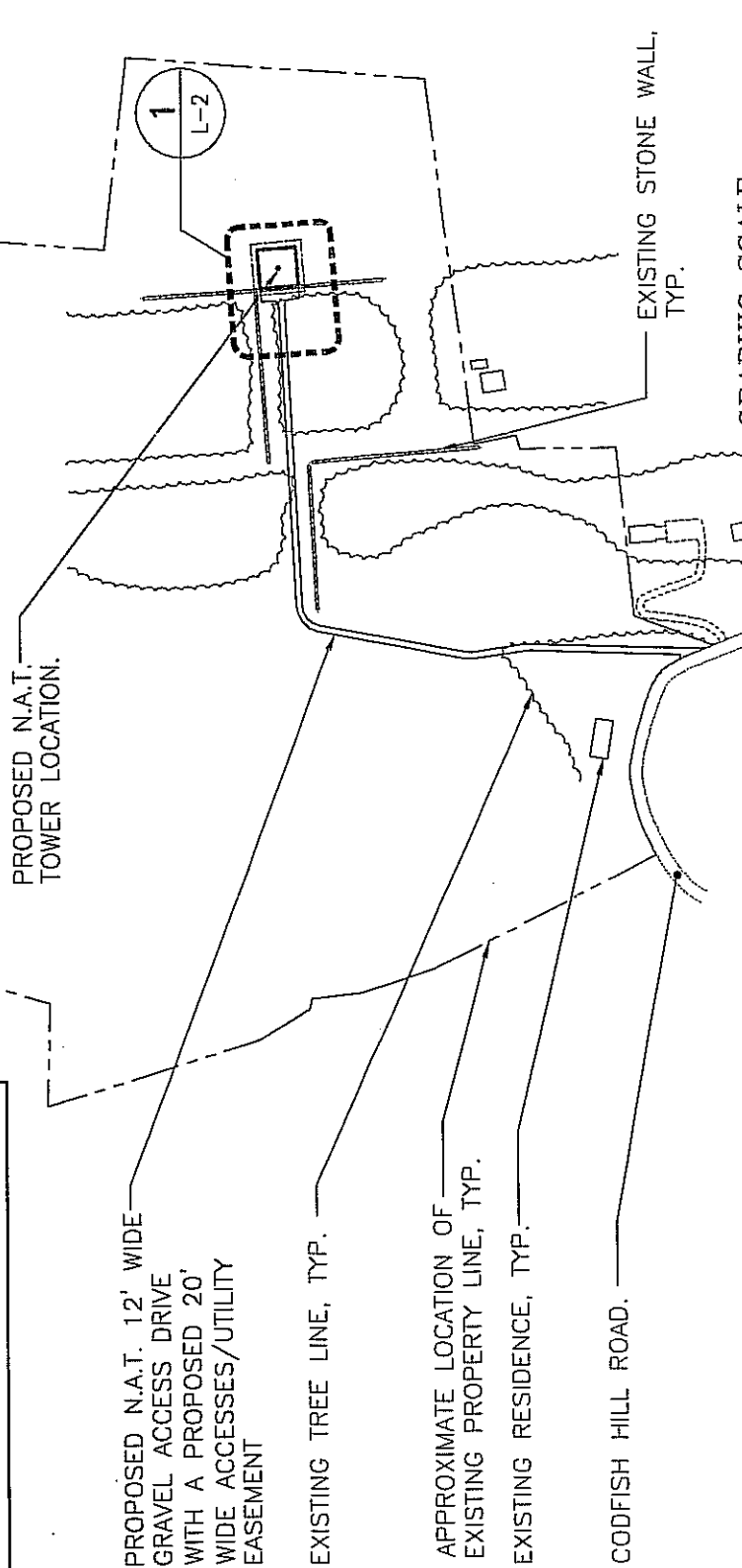
USGS 24K Quad: Bethel, CT 1985; Danbury, CT 1985; Newbury, CT 1985; Bethel, CT 1985

Figure 2 - Topographic Map
CT 1155C/BETHEL CT
64 CODFISH HILL RD
BETHEL, CT 06801

THIS LEASE PLAN IS DIAGRAMMATIC IN NATURE AND IS INTENDED TO PROVIDE GENERAL INFORMATION REGARDING THE LOCATION AND SIZE OF THE PROPOSED WIRELESS COMMUNICATION FACILITY. THE SITE LAYOUT WILL BE FINALIZED UPON COMPLETION OF SITE SURVEY AND FACILITY DESIGN.

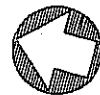
PROPERTY LINE REFERENCE NOTE:
PROPERTY LINES DEPICTED HEREIN ARE
BASED ON GIS MAPPING AVAILABLE ON
TOWN OF BETHEL'S ONLINE DATABASE.

PRELIMINARY SITE COORDINATES:
LAT.: 41°-22'-29"
LNG.: -73°-22'-16"
GROUND ELEVATION:
595.8' ± A.M.S.L.



SITE PLAN

SCALE: 1"=350'



NORTH

GRAPHIC SCALE



(IN FEET)
1 inch = 350 ft.

REV.	DATE	DRAWN BY	CHECK'D BY	DESCRIPTION
1	05/15/13	TMD	CFC	RELOCATE COMPOND
0	05/03/13	HAIR	CFC	LEASE EXHIBIT-CLIENT REVIEW

725 41224147 7843633106

519601
*
3159147 HALLAM

CONTENTS

800.468.4527
800.468.4527 fax
3-3 North Broad Road
Portland, CT 04105
www.CarlisleLing.com

NORTH ATLANTIC TOWERS
SITE NUMBER: CT11550
SITE NAME: BETHEL
64 CODRISH HILL ROAD
BETHEL, CT

DATE:	05/02/13
SCALE:	AS SHOWN
JOB NO.	13115

SHEET NO. 1

DESIGNED BY: HMR	DATE: 05/03/13	REV: 1
DRAWN BY: HMR	DATE: 05/03/13	REV: 2
CHECKED BY: DMD	DATE: 05/03/13	REV: 3
DESCRIPTION	BY	DATE
RELOCATE COMPOUND	HMR	05/15/13
LEASE EXHIBIT-CLIENT REVIEW	CFC	05/03/13

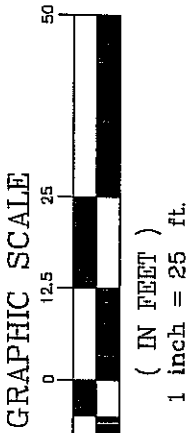
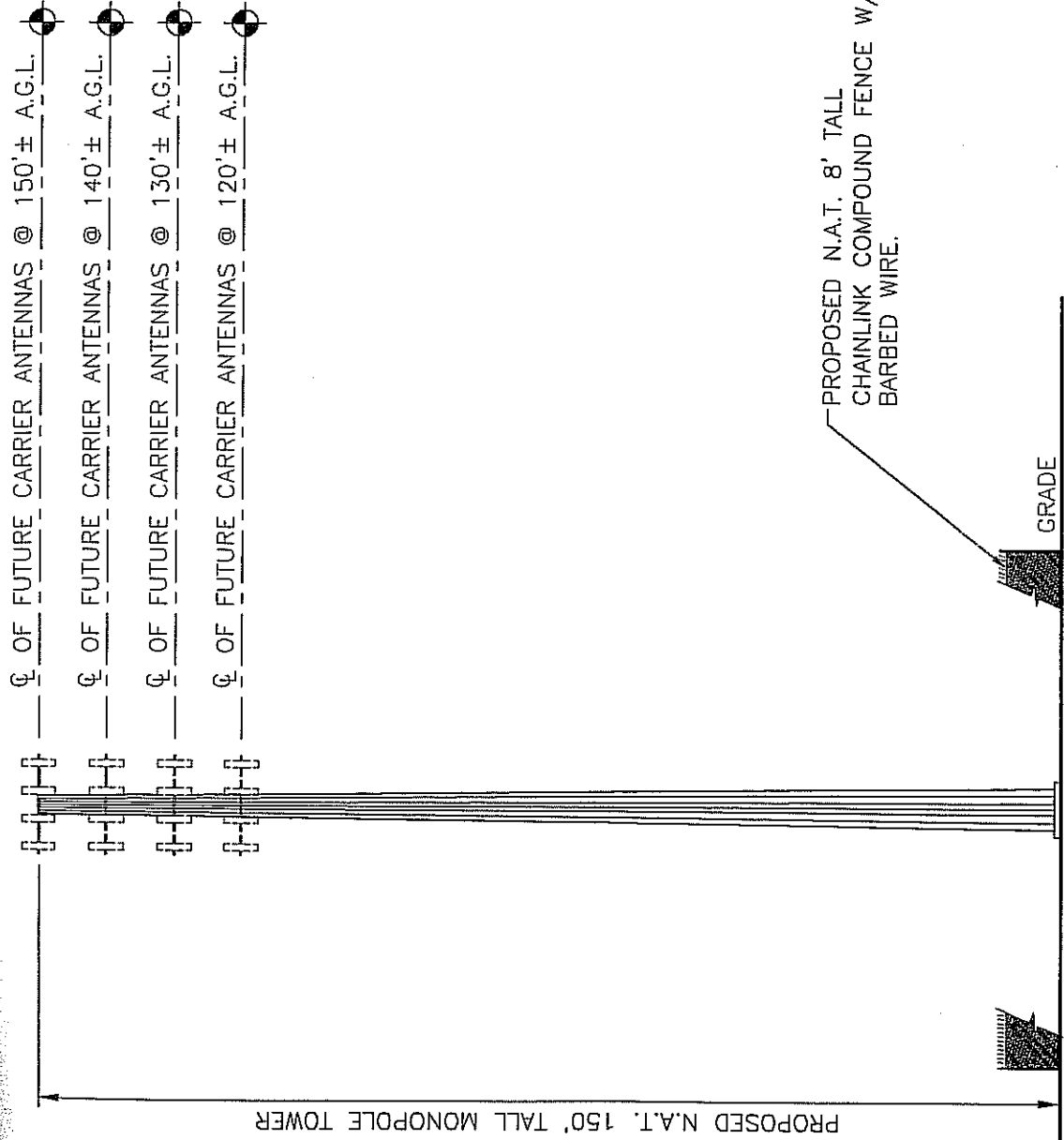
PROFESSIONAL DESIGNER SEAL

HEATH AND ARTHE
TOWERS

CENTEK
Civil Engineering
1275 JAB 1000
1000 North Main Road
Bristol, CT 06043
www.centekeng.com

NORTH ATLANTIC TOWERS
SITE NUMBER: CT11550
SITE NAME: BETHEL
84 CODRISH HILL ROAD
BETHEL, CT
DATE: 05/02/13
SCALE: AS SHOWN
JOB NO. 13116

SHEET NO.
L-3



1
L-3
ELEVATION
SCALE: 1"=25'-0"

PHOTOGRAPHS



1. Facing north to proposed access road

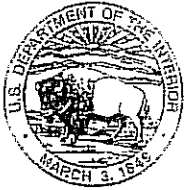


2. Facing north to proposed access road



3. Facing east to proposed access road

SPECIES REVIEW DOCUMENTATION



United States Department of the Interior



FISH AND WILDLIFE SERVICE

New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5087
<http://www.fws.gov/newengland>

January 7, 2013

To Whom It May Concern:

This project was reviewed for the presence of federally listed or proposed, threatened or endangered species or critical habitat per instructions provided on the U.S. Fish and Wildlife Service's New England Field Office website:

(<http://www.fws.gov/newengland/EndangeredSpec-Consultation.htm>)

Based on information currently available to us, no federally listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service are known to occur in the project area(s). Preparation of a Biological Assessment or further consultation with us under section 7 of the Endangered Species Act is not required. No further Endangered Species Act coordination is necessary for a period of one year from the date of this letter, unless additional information on listed or proposed species becomes available.

Thank you for your cooperation. Please contact Mr. Brett Hillman of this office at 603-223-2541 if we can be of further assistance.

Sincerely yours,

Thomas R. Chapman
Supervisor
New England Field Office

**FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES
IN CONNECTICUT**

COUNTY	SPECIES	FEDERAL STATUS	GENERAL LOCATION/HABITAT	TOWNS
Fairfield	Piping Plover	Threatened	Coastal Beaches	Westport, Bridgeport and Stratford
	Roseate Tern	Endangered	Coastal beaches, Islands and the Atlantic Ocean	Westport and Stratford
	Bog Turtle	Threatened	Wetlands	Ridgefield and Danbury.
Hartford	Dwarf wedgemussel	Endangered	Farmington and Podunk Rivers	South Windsor, East Granby, Simsbury, Avon and Bloomfield.
Litchfield	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Sharon.
	Bog Turtle	Threatened	Wetlands	Sharon and Salisbury.
Middlesex	Roseate Tern	Endangered	Coastal beaches, islands and the Atlantic Ocean	Westbrook
	Piping Plover	Threatened	Coastal Beaches	Clinton, Westbrook, Old Saybrook.
	Puritan Tiger Beetle	Threatened	Sandy beaches along the Connecticut River	Cromwell, Portland
New Haven	Bog Turtle	Threatened	Wetlands	Southbury
	Piping Plover	Threatened	Coastal Beaches	Milford, Madison and West Haven
	Roseate Tern	Endangered	Coastal beaches, Islands and the Atlantic Ocean	Branford, Guilford and Madison
	Indiana Bat	Endangered	Mines, Caves	
New London	Piping Plover	Threatened	Coastal Beaches	Old Lyme, Waterford, Groton and Stonington.
	Roseate Tern	Endangered	Coastal beaches, Islands and the Atlantic Ocean	East Lyme, New London and Waterford.
	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Waterford
Tolland	None			

-Eastern cougar, gray wolf, Indiana bat, Seabeach amaranth and American burying beetle are considered extirpated in Connecticut.

-There is no federally-designated Critical Habitat in Connecticut.

7/31/2008



U.S. Fish and Wildlife Service

Natural Resources of Concern

This resource list is to be used for planning purposes only — it is not an official species list.

Endangered Species Act species list information for your project is available online and listed below for the following FWS Field Offices:

NEW ENGLAND ECOLOGICAL SERVICES FIELD OFFICE
70 COMMERCIAL STREET, SUITE 300
CONCORD, NH 03301
(603) 223-2541
<http://www.fws.gov/newengland>

Project Name:

Bethel CT



U.S. Fish and Wildlife Service

Natural Resources of Concern

Project Location Map:



Project Counties:

Fairfield, CT

Geographic coordinates (Open Geospatial Consortium Well-Known Text, NAD83):

MULTIPOLYGON (((-73.3740075 41.3742123, -73.3708537 41.375106, -73.3706391 41.3747437, -73.371079 41.3746068, -73.371197 41.3748242, -73.3736969 41.3741399, -73.3730531 41.3723364, -73.3733535 41.372433, -73.3740075 41.3742123)))

Project Type:

Communications Tower



U.S. Fish and Wildlife Service

Natural Resources of Concern

Endangered Species Act Species List (USFWS Endangered Species Program).

There are no listed species found within the vicinity of your project.

FWS National Wildlife Refuges (USFWS National Wildlife Refuges Program).

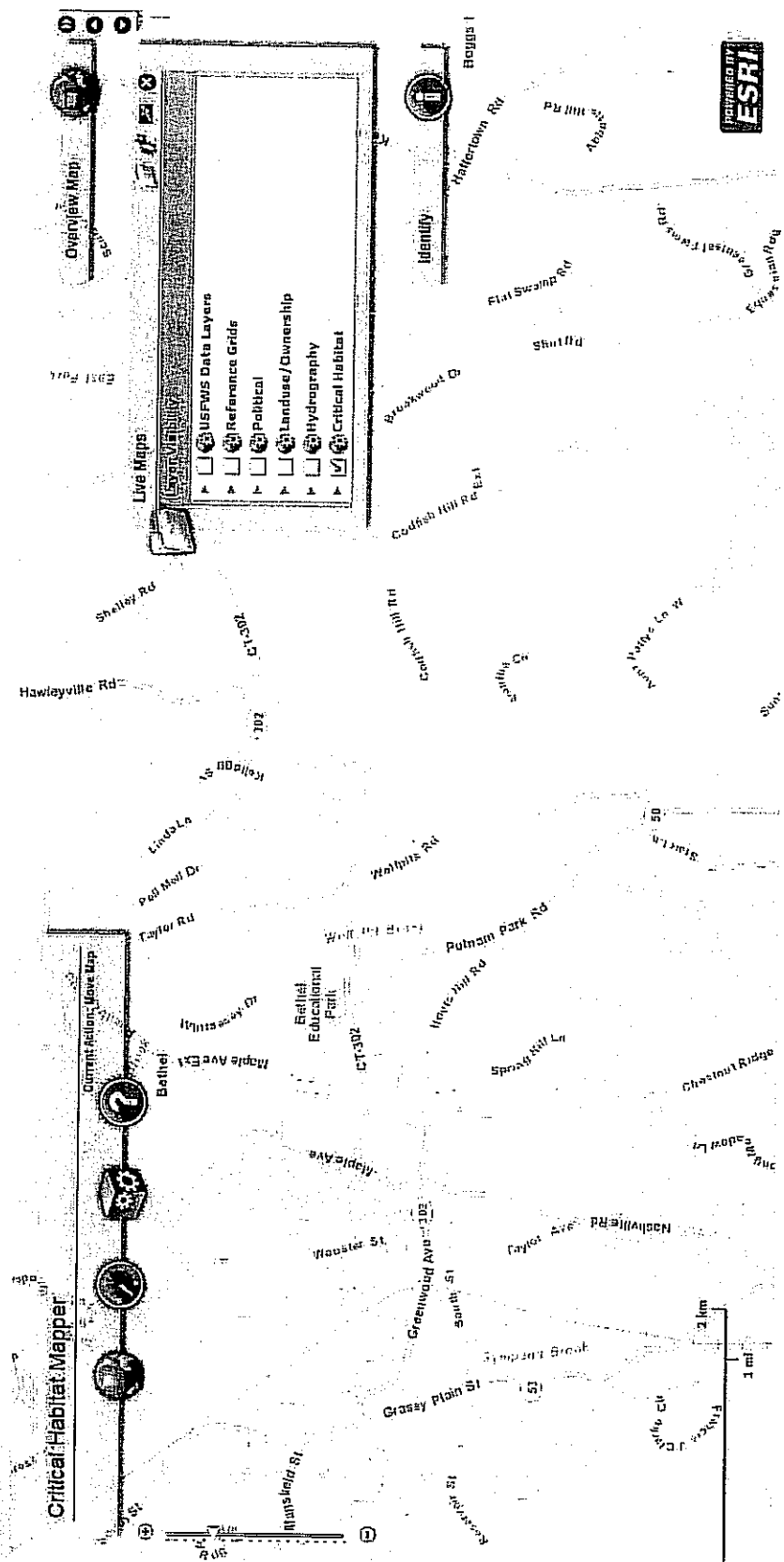
There are no refuges found within the vicinity of your project.

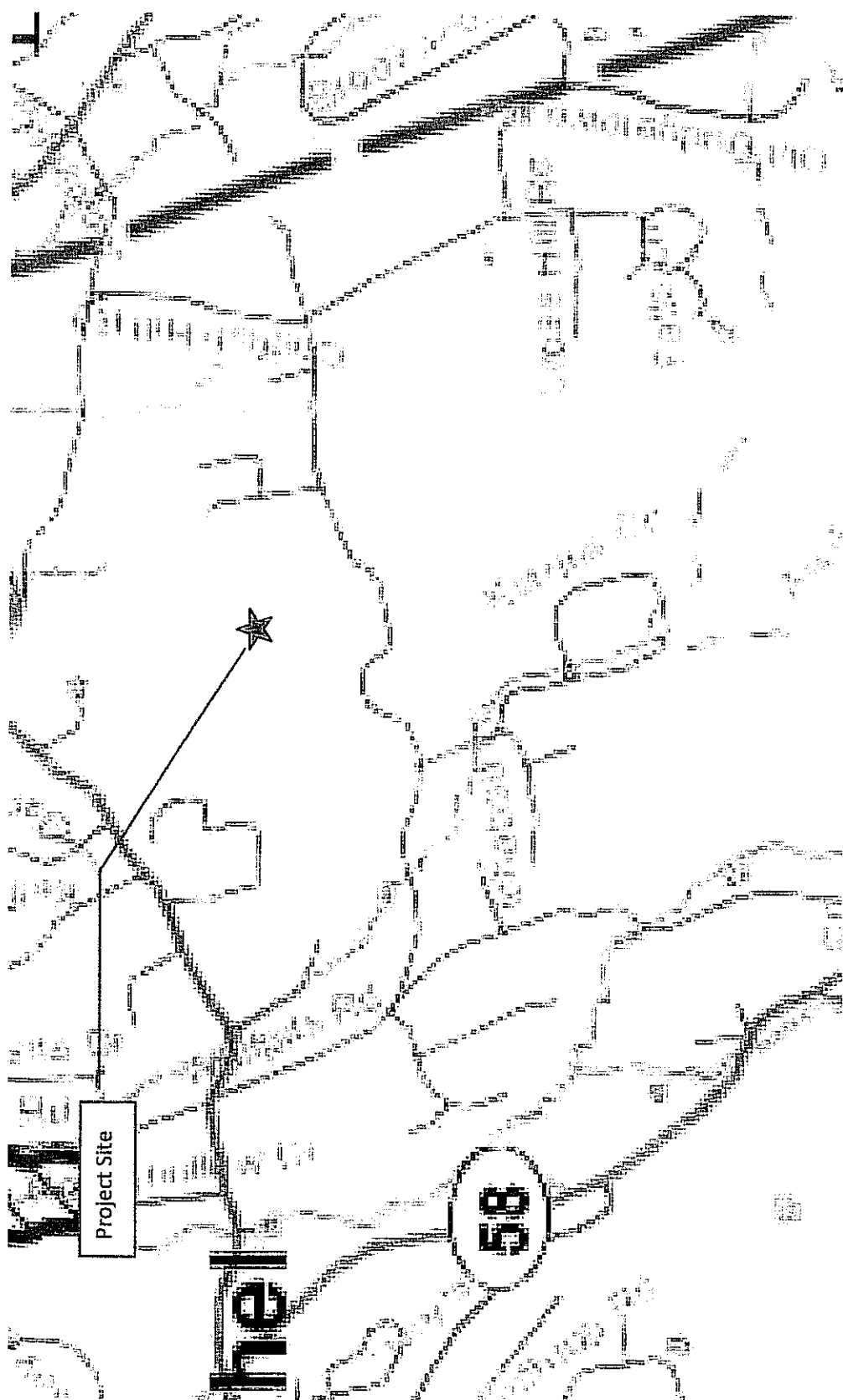
FWS Migratory Birds (USFWS Migratory Bird Program).

Most species of birds, including eagles and other raptors, are protected under the Migratory Bird Treaty Act (16 U.S.C. 703). Bald eagles and golden eagles receive additional protection under the Bald and Golden Eagle Protection Act (16 U.S.C. 668). The Service's Birds of Conservation Concern (2008) report identifies species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become listed under the Endangered Species Act as amended (16 U.S.C 1531 et seq.).

NWI Wetlands (USFWS National Wetlands Inventory).

The U.S. Fish and Wildlife Service is the principal Federal agency that provides information on the extent and status of wetlands in the U.S., via the National Wetlands Inventory Program (NWI). In addition to impacts to wetlands within your immediate project area, wetlands outside of your project area may need to be considered in any evaluation of project impacts, due to the hydrologic nature of wetlands (for example, project activities may affect local hydrology within, and outside of, your immediate project area). It may be helpful to refer to the USFWS National Wetland Inventory website. The designated FWS office can also assist you. Impacts to wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes. Project Proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate U.S. Army Corps of Engineers District.





SUPPORTING DOCUMENTATION



U.S. Fish and Wildlife Service

National Wetlands Inventory

61133025 NWI Map

Jun 19, 2013

Wetlands

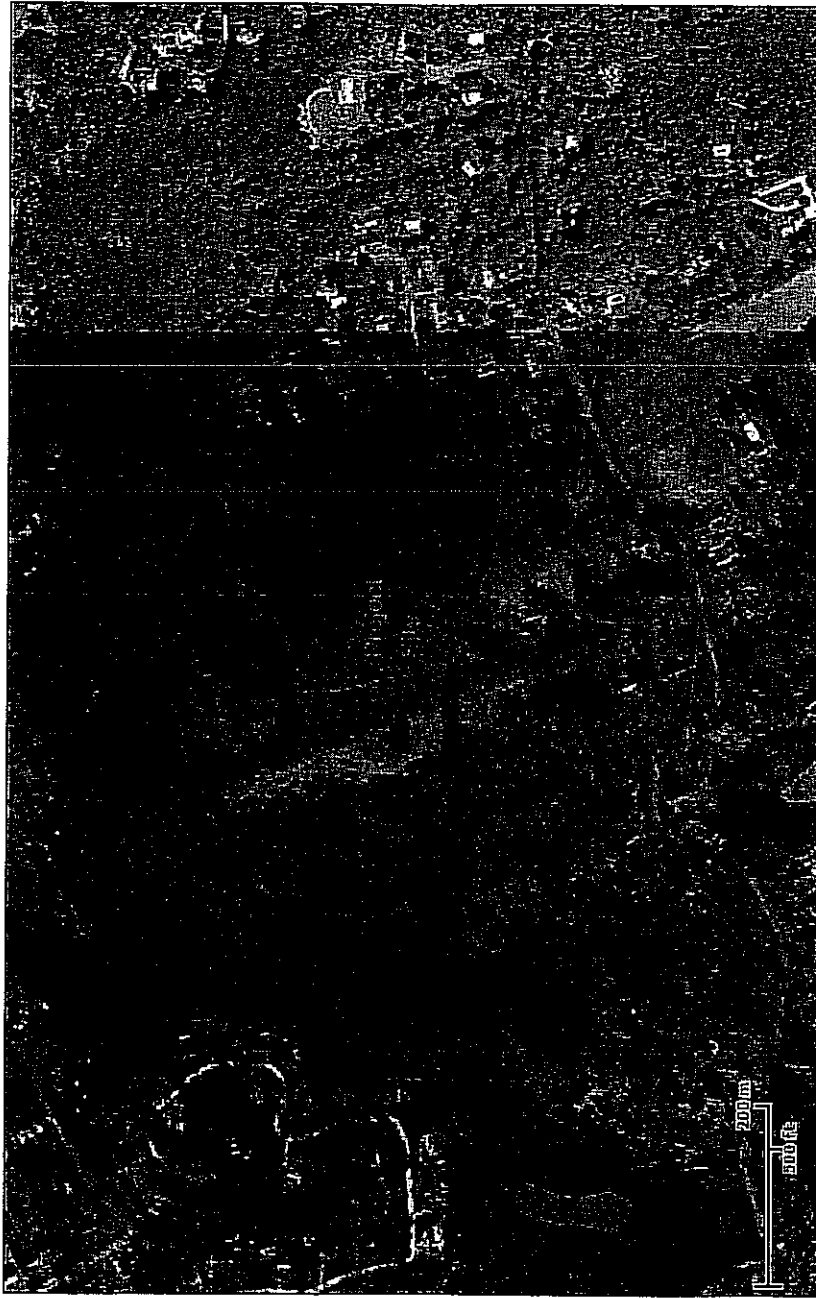
- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

Riparian

- Herbaceous
- Forested/Shrub

Riparian Status

- Digital Data



This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currency of the data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:

- ☒ USGS Ecosystems
- ☒ USGS Protected Area Owner (PADUS)
- ☒ USGS Protected Area Conservation Status
- ☒ USGS GAP Land Cover
- ☒ FWS Wetlands
- ☒ BLM Public Land Survey System (PLSS)
- ☒ National Park Service (NPS) Boundaries
- ☒ NGA US National Grid



Scale: 1:100,000
 Grid Position: 41° 22' 10" N 79° 23' 10" W

Soil Map—State of Connecticut



MAP LEGEND

Area of Interest (AOI)	Very Stony Spot
Area of Interest (AOI)	Wet Spot
Soils	Other
Soil Map Units	
Special Point Features	Special Line Features
Blowout	Gully
Borrow Pit	Short Steep Slope
Clay Spot	Other
Closed Depression	Political Features
Gravel Pit	Cities
Gravelly Spot	Water Features
Landfill	Streams and Canals
Lava Flow	Transportation
Marsh or swamp	Rails
Mine or Quarry	Interstate Highways
Miscellaneous Water	US Routes
Perennial Water	Major Roads
Rock Outcrop	Local Roads
Saline Spot	
Sandy Spot	
Severely Eroded Spot	
Sinkhole	
Slide or Slip	
Sodic Spot	
Spill Area	
Stony Spot	

MAP INFORMATION

Map Scale: 1:2,280 If printed on A size (8.5" x 11") sheet.
The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: UTM Zone 18N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: State of Connecticut
Survey Area Data: Version 10, Mar 31, 2011

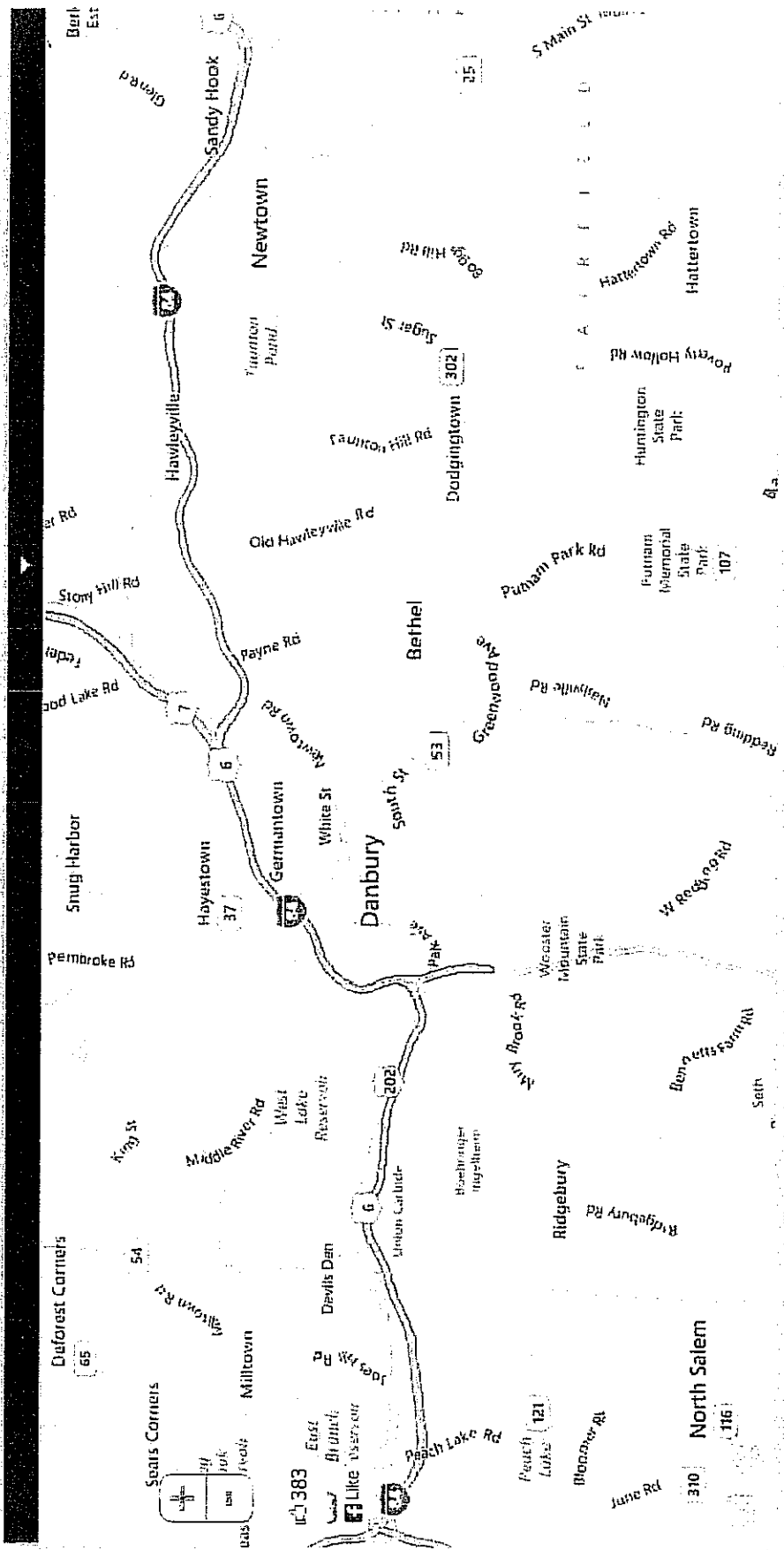
Date(s) aerial Images were photographed: 8/5/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

State of Connecticut (CT600)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
46B	Woodbridge fine sandy loam, 2 to 8 percent slopes, very stony	0.4	17.1%
73C	Charlton-Chatfield complex, 3 to 15 percent slopes, very rocky	0.5	20.9%
75E	Hollis-Chatfield-Rock outcrop complex, 15 to 45 percent slopes	0.5	19.5%
84B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes	0.8	32.3%
84D	Paxton and Montauk fine sandy loams, 15 to 25 percent slopes	0.3	10.3%
Totals for Area of Interest		2.5	100.0%

wilderness.net



Wildernesses Managed By: ☐ Bureau of Land Management ☐ Fish and Wildlife Service ☒ Forest Service ☒ National Park Service

SHILLER

TRAIL

SPRINGFIELD
CONN

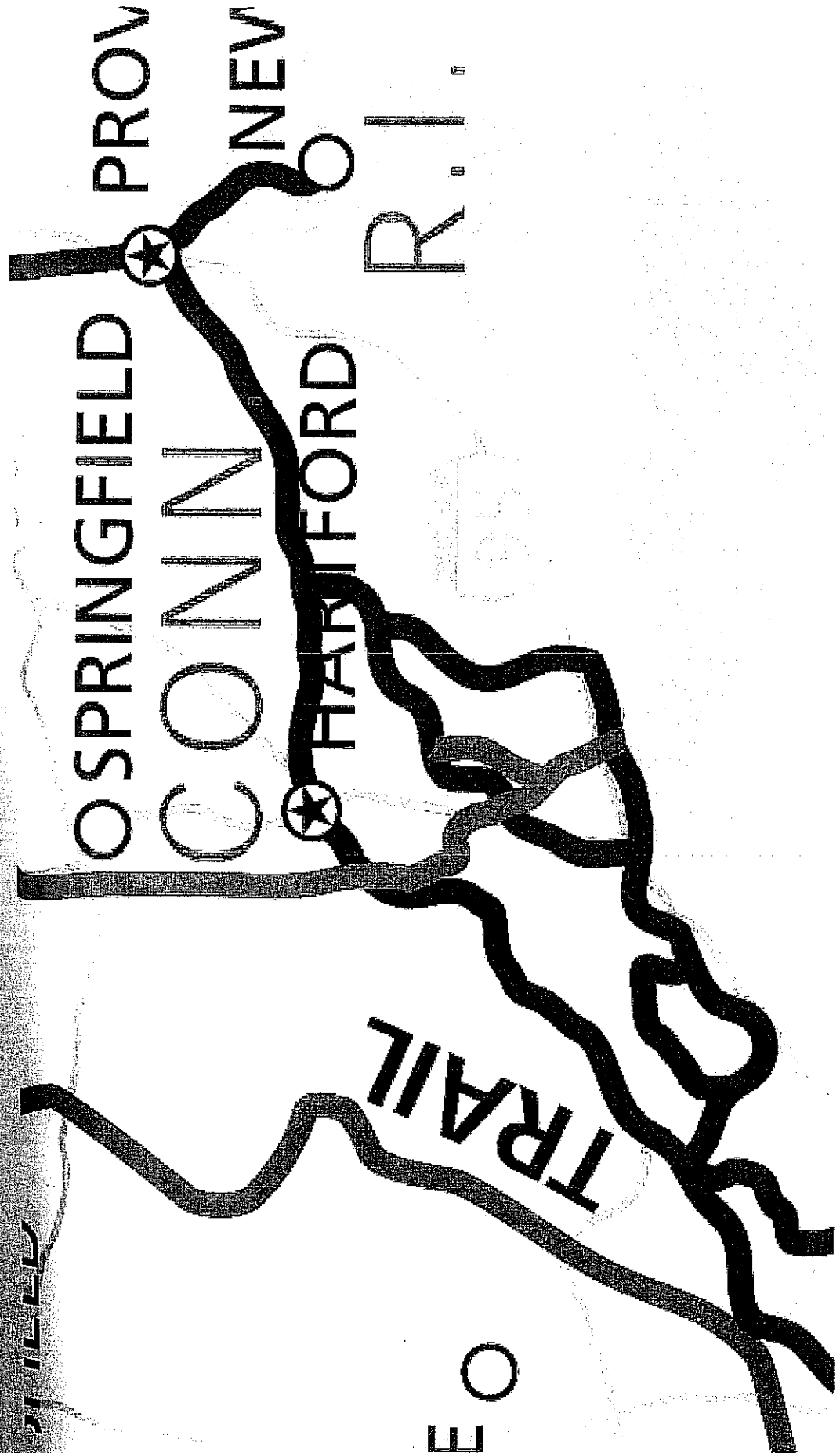
HARTFORD

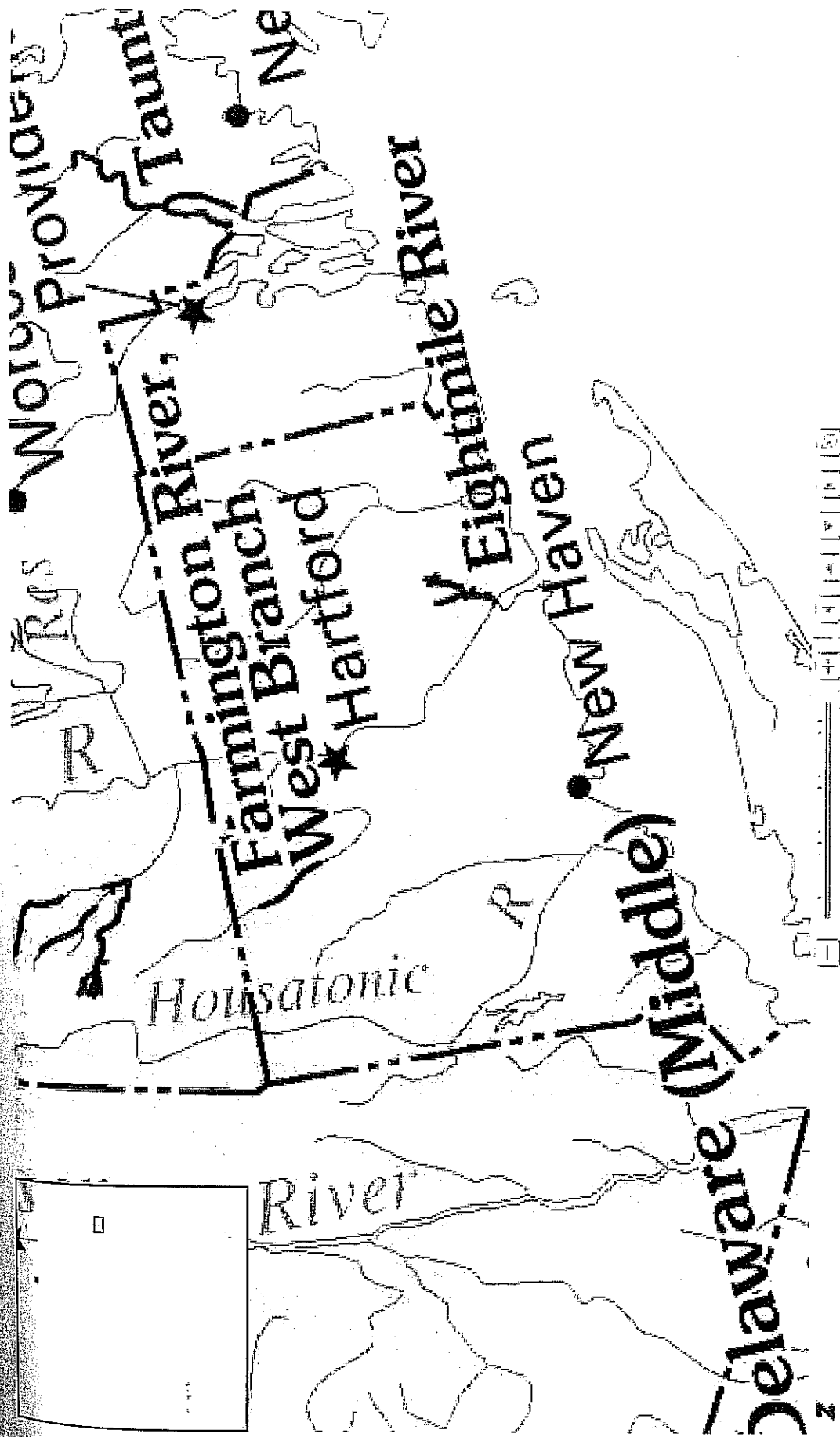
PROV

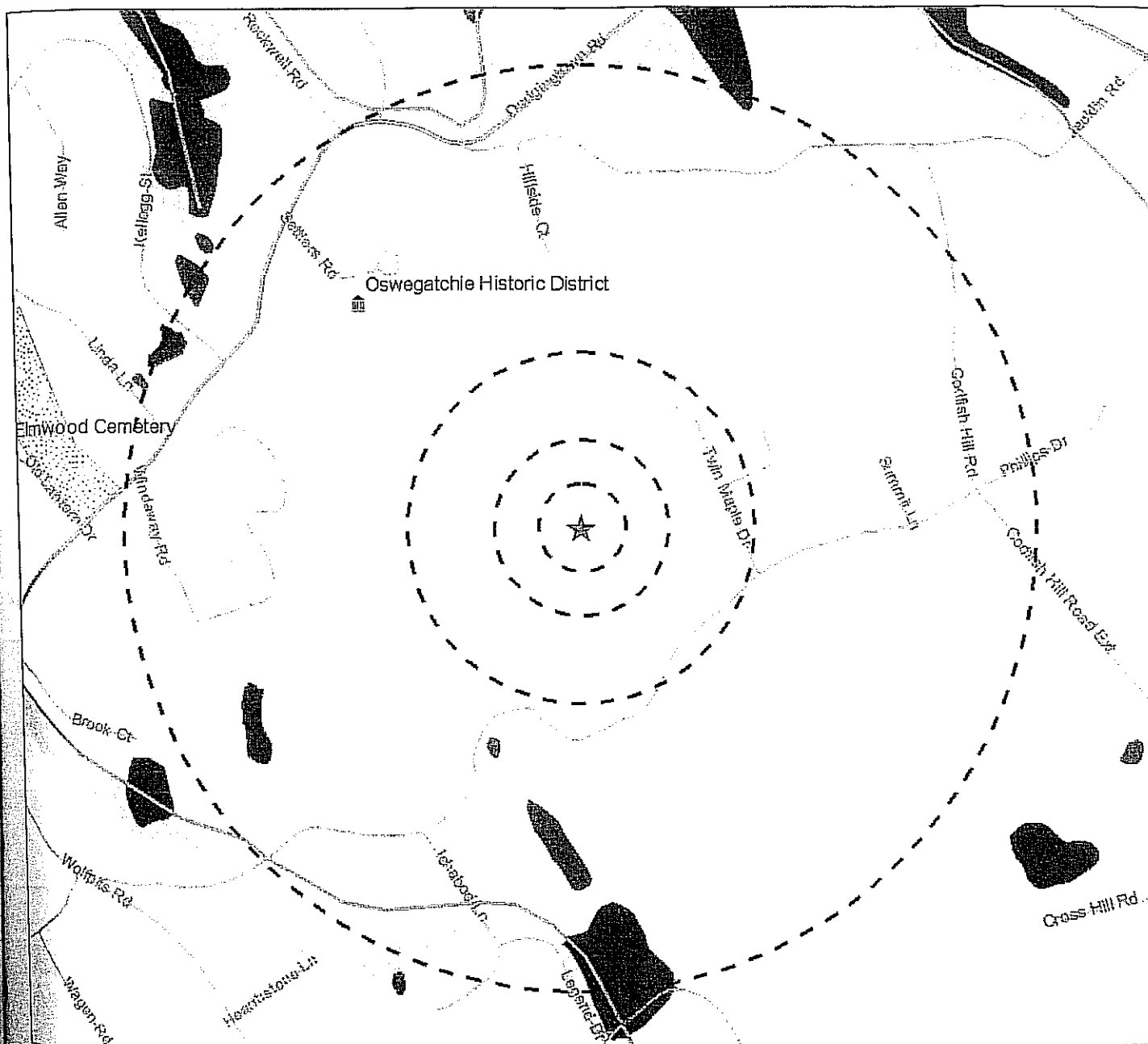
NEW

R.I.

EO







Legend

★ Project Site [Dashed Circle] Site Buffer at 250', 500', 1000' and 1/2 mile

See associated legend for additional map symbology

Source: See associated map legend

Land and Historic Resources Map

CT 1155C/Bethel CT

64 Codfish Hill Rd

Bethel, CT 06801

PN 81133025




0 500 1000 feet

National Datalayers Legend*

 National Register Historic Site / District Center


National Register Historic District Boundary

Source: NPS National Register of Historic Places,
updated December 2011

 National Park Service Trail

Source: U.S. National Parks Service, Various dates.
NR/GIS WebSite, U.S. Dept. of the Interior, NPS, Wash., D.C.
<http://science.nature.nps.gov/nrddata/index.cfm>

 National Scenic Parkway

 National Wild and Scenic River



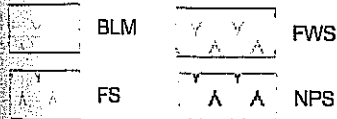
Federally Owned Land

Source: National Atlas of the U.S., Reston, VA, 12/05,
National Wilderness Preservation System
Federal Land Features of the U.S.
-Parkways and Scenic Rivers
-Federal Lands of the United States
-National Wilderness Areas

FWS Critical Habitat







Source: U.S. Fish and Wildlife Service, Various dates.
FWS Critical Habitat for Threatened & Endangered Species website.
U.S. Dept. of the Interior, FWS, Wash, D.C.
<http://crithab.fws.gov/>


National Wilderness Areas by Agency



*Includes data obtained from federal agencies
developed to be consistent throughout the US.

FEMA Q3 Flood Zone

-  500-year inundation area.
-  100-year inundation area.
-  100-year inundation area with velocity hazard.
-  Area not included on any FIRM publication.
-  Undetermined but possible flood hazard area.
-  Floodway area, including watercourse extent.

 No Flood Data Available

Source: FEMA Q3 Data


Connecticut - State Specific Datalayers Legend

 CT - Natural Diversity Database Area

Source: CT DEP
Data Date: December 2012
<http://www.ct.gov/dep/gis>

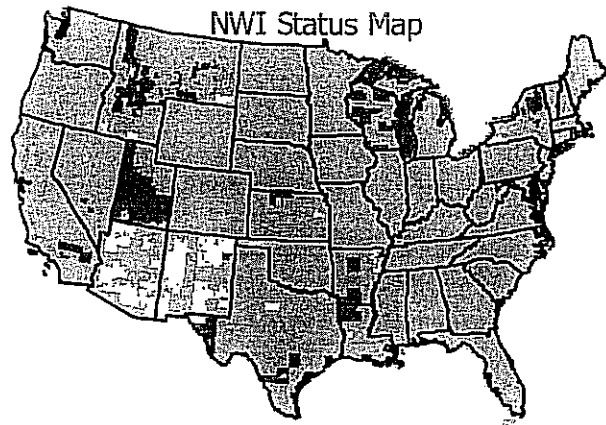
 CT - DEP Property

Source: CT DEP
Data Date: October 2009
<http://www.ct.gov/dep/gis>





 CT - DEP Municipal and Open Space

Source: CT DEP Office of Information Management
Data Date: 1997
<http://www.ct.gov/dep/gis>

Land Based and Historic Resources Legend










Continental US Status

-  Digital
-  Non-Digital
-  Scan
-  No Data


Source: U.S. Fish and Wildlife Service, Various dates.
National Wetlands Inventory website.
U.S. Dept. of the Interior, FWS, Wash, D.C.
<http://www.fws.gov/nwi/>



National Wetlands Inventory

-  Freshwater Emergent
-  Freshwater Forested/Shrub
-  Estuarine and Marine Deepwater
-  Estuarine and Marine
-  Freshwater Pond
-  Lake
-  Riverine
-  Other

 CT - DEP Critical Habitat

Source: CT DEP
Data Date: December 2009
<http://www.ct.gov/dep/gis>

 CT - Aquifer Protection Area

 Final
 Preliminary

Source: CT DEP
Data Date: March 2010
<http://www.ct.gov/dep/gis>

 CT - DEP Trails

Source: CT DEP
Data Date: January 2010
<http://www.ct.gov/dep/gis>

QUALIFICATIONS

SUMMARY OF EXPERIENCE

WITH EBI CONSULTING, MS. COURSELLE IS AN ARCHITECTURAL HISTORIAN, MEETING THE SECRETARY OF THE INTERIOR'S TECHNICAL QUALIFICATION STANDARDS FOR HISTORY AND ARCHITECTURAL HISTORY. SHE SPECIALIZES IN CONDUCTING CULTURAL RESOURCES SURVEYS AND ASSESSING NATIONAL REGISTER ELIGIBILITY OF HISTORIC STRUCTURES AND SITES AS PART OF THE NATIONAL ENVIRONMENTAL POLICY ACT AND NATIONAL HISTORIC PRESERVATION ACT COMPLIANCE PROCESSES. PRIOR TO WORKING AT EBI, MS. COURSELLE'S FOUR YEARS OF PROFESSIONAL EXPERIENCE HAVE INCLUDED EMPLOYMENT WITH CULTURAL RESOURCE MANAGEMENT AND ENGINEERING FIRMS, WHERE SHE COMPLETED SEVERAL CULTURAL RESOURCES SURVEYS AND DOCUMENTATION FOR A VARIETY OF PROJECT TYPES INCLUDING HISTORIC PROPERTY EVALUATIONS, NRHP NOMINATIONS, BUILDING DOCUMENTATION AND HISTORIC CONTEXT STUDIES.

MS. COURSELLE NOW FOCUSES ON FEDERAL COMMUNICATIONS COMMISSION SECTION 106 PROJECTS FOR EBI'S WIRELESS INDUSTRY CLIENTS.

RELEVANT PROJECT EXPERIENCE

UNIVERSITY OF KENTUCKY, MASTER'S PROJECT – HISTORIC CONTEXT STUDY OF A MID-TWENTIETH CENTURY SEGREGATED RESIDENTIAL SUBDIVISION IN NEW ORLEANS, LA.

UNIVERSITY OF KENTUCKY'S CENTER FOR HISTORIC ARCHITECTURE AND PRESERVATION – AS A RESEARCH ASSISTANT, CO-AUTHORED A HISTORIC CONTEXT STUDY OF CENTRAL KENTUCKY HISTORIC FARMS AND CO-AUTHORED A NATIONAL REGISTER OF HISTORIC PLACES BOUNDARY EXPANSION APPLICATION.

HANOVER COUNTY, VA – CONDUCTED AN ARCHITECTURAL SURVEY OF APPROXIMATELY 100 BUILDINGS INCLUDING PHOTOGRAPHS AND STATE INVENTORY FORMS TO UPDATE THE COUNTY'S HISTORIC RESOURCES DATABASE.

FORT BENNING, COLUMBUS, GA – PERFORMED PHOTOGRAPHIC SURVEY OF COLD WAR ERA RESOURCES AND ASSISTED SENIOR ARCHITECTURAL HISTORIAN WITH THE INSTALLATION'S HISTORIC PROPERTIES TREATMENT PLAN REPORT.

U.S. DEPARTMENT OF DEFENSE'S LEGACY RESOURCE MANAGEMENT PROGRAM – CONTRIBUTING AUTHOR TO REPORT ON THE THIRTEEN MILITARY INSTALLATIONS IN THE STATE OF GEORGIA, FOCUSING ON THEIR DEVELOPMENT LEADING UP TO AND INVOLVEMENT IN THE COLD WAR.

CENTRAL NEW YORK – PERFORMED PHOTOGRAPHIC SURVEY OF HISTORIC RESOURCES IN VIEW-SHED ASSESSMENTS.

MAINE DEPARTMENT OF TRANSPORTATION – PERFORMED PHOTOGRAPHIC SURVEY AND COMPLETED PHASE I ASSESSMENTS OF HISTORIC RESOURCES IN A 100 MILE TRANSPORTATION CORRIDOR.

VIRGINIA – PARTICIPATED IN NUMEROUS ARCHAEOLOGICAL EXCAVATIONS OF ALL THREE PHASES.

EDUCATION

2007 MASTER OF HISTORIC PRESERVATION, UNIVERSITY OF KENTUCKY

2003 BACHELOR OF ARCHITECTURAL HISTORY AND B.A. IN HISTORY, MINOR IN ARCHAEOLOGY, UNIVERSITY OF VIRGINIA



Amber L. Courselle
Architectural Historian

PROFESSIONAL TRAINING

- 2006 RECORDING BUILDINGS: FIELD SCHOOL IN EARLY AMERICAN ARCHITECTURE, PRESENTED BY DR. CARL LOUNSBURY, ARCHITECTURAL RESEARCH DEPARTMENT, COLONIAL WILLIAMSBURG FOUNDATION
2003 INTRODUCTION TO SECTION 106 REVIEW TRAINING COURSE, PRESENTED BY DON KLIMA, ACHP

PROFESSIONAL AFFILIATIONS

NATIONAL TRUST FOR HISTORIC PRESERVATION
VERNACULAR ARCHITECTURE FORUM
PRESERVATION RESOURCE CENTER OF NEW ORLEANS
RECENT PAST PRESERVATION NETWORK



Richard Bolton

Wetland Scientist

21 B Street

Burlington, MA 01803

Office: 781.418.2329 Mobile: 781.281.6147 Fax: 781.418.2379

SUMMARY OF EXPERIENCE

Mr. Bolton is a Senior Environmental Scientist at EBI Consulting with over ten years of experience conducting watershed, wetland and stream related studies, assessments and management plans. He has managed field teams, conducted field work and prepared numerous wetland delineation reports, impact assessments, permits, mitigation plans and mitigation monitoring reports. He has completed stream restoration training including: Rosgen Levels I & II fluvial geomorphology and the EPA's Watershed Assessment of River Stability and Sediment Supply (WARSS) training. Mr. Bolton routinely works within an interdisciplinary framework to successfully avoid, minimize, and compensate environmental impacts. His expertise includes impact assessment of natural resources for transportation and infrastructure projects, watershed planning, Section 404 and 401 permits, and habitat related aspects of ecosystem rehabilitation and restoration projects.

RELEVANT PROJECT EXPERIENCE

Vermont Agency of Transportation, CIRC-Williston Transportation Project, Environmental Impact Statement (EIS), Chittenden County, Vermont. Mr. Bolton coordinated with the U.S. Army Corps of Engineers (USACE), Environmental Protection Agency (EPA), and Federal Highways Administration (FHWA) technical specialists to assess indirect impacts to wetland functions and services, particularly wetland dependent wildlife species. He worked closely with highway and drainage engineers to avoid impacts at stream crossings and minimize impacts from storm water management BMPs and through roadway median adjustments. The indirect impact analysis included impacts to landscape features including grassland and interior forest habitats, aquatic habitat networks, noise impacts to adjacent habitats based on daily traffic volumes and fragmentation of vernal pool species habitats.

New York State Department of Transportation (NYSDOT), Ecological Services. Mr. Bolton led the field team, assessing wetland mitigation sites throughout Dutchess, Westchester, Rockland, Putnam, Orange, Onondaga and Oswego Counties from 2005-2006. The team conducted vegetation plot monitoring and a delineation of each wetland zone based on plant community and hydrologic indicators. He authored wetland monitoring reports for five mitigation projects for the 2005 monitoring year and eight mitigation projects for the 2006 monitoring year. Mr. Bolton monitored nine NYSDOT wetland mitigation areas in 2007 including conducting wetland remediation studies for two mitigation projects. He has conducted six wetland delineations under the agreement since 2007. Mr. Bolton has authored numerous monitoring reports and is task manager for all wetland monitoring efforts under this contract for the 2008 through 2011 monitoring years.

New Jersey Turnpike Authority, NJ Turnpike Interchange 6 to 9 Widening Program, Burlington, Mercer and Middlesex Counties, NJ. Mr. Bolton coordinated the field review and multiple inspections of over 90 potential vernal pool locations. He field reviewed all impacted certified vernal pools with a NJ DEP Herpetologist, discussed direct and secondary impacts caused by the permitted actions and noted, given the impact, what habitat attributes would be preferred at mitigation sites. The review of vernal habitats and description of impacts was a special condition of the New Jersey Freshwater Wetlands Permit.

Dominion Transmission Inc., Tioga Storage Factory Project, Tioga County, Pennsylvania. Mr. Bolton conducted preliminary mapping assessments and construction access analysis for a proposed 12 mile pipeline and natural gas storage facility project. He delineated all wetlands and waterways along the corridor and proposed access roads. He completed a field review and jurisdictional determination with the USACE and Pennsylvania Department of Environmental Protection (PA DEP).

Passaic County Planning Department, Molly Ann Brook Watershed Management Plan, Passaic County, New Jersey. Responsible for the ecological, hydrological and geomorphological aspects of the stream physical assessment and watershed characterization portions of the management plan. He coordinated field studies including USGS Visual Assessment Protocol (VAP), Rosgen Level I stream reach classification, stormwater outfall inventory and stormwater Best Management Practice (BMP) retrofit identification. Mr. Bolton analyzed hydrograph data and calibrated shift adjusted rating curves for intermittent channels and field verification with a USGS Gage. He has characterized the differences in flow and sediment regimes over several tributaries of varying watershed slope and impervious area concentrations using the Watershed Assessment of River Stability and Sediment Supply (WARSSS) methodology developed by the Environmental Protection Agency (EPA) and examining macroinvertebrate and bacteriological trends as they relate to differing urban flow regimes. Mr. Bolton authored parts of the management plan which included recommendations to improve water quality and monitor the performance of implemented BMP retrofits and stream restoration/floodplain reconnection projects.

EDUCATION

B.T., Wildlife Management, State University of New York at Cobleskill, 2000
A.A.S., Fisheries and Wildlife Biology, State University of New York at Cobleskill, 1997

PROFESSIONAL REGISTRATIONS

Rosgen Level II, River Morphology and Applications, 2010
Rosgen Level I, Applied Fluvial Geomorphology, 2004
Watershed Assessment of River Stability and Sediment Supply (WARSS) Training 2008
Maryland DNR Forest Interior Dwelling species (FIDs) Qualified Professional, 2004

PUBLICATIONS

NCHRP Project 25-25, Task68: Implementing Measures to Reduce Highway Impacts on Fragmentation. Mr. Bolton conducted a research review of existing practices and interviewed state transportation agencies to determine how DOTs are implementing and practicing the (mitigation) avoidance, minimization and compensation of impacts to wildlife and wildlife habitats, specifically habitat fragmentation. The research focuses on implemented programs which infuse the principles of habitat connectivity at a landscape scale which are cost efficient and effective in practice at reducing direct and indirect impacts to wildlife and natural habitats. The deliverable is a web-based decision making tool for planners, engineers and other transportation project practitioners so that habitat fragmentation considerations are more easily incorporated at the regional planning, project planning, NEPA/project design and facility operation levels. Mr. Bolton is a co-author of the report and was key staff within the consultant research team.



Michael Lawton
SAI Communications
260 Cedar Hill St.
Marlborough, MA 01752
Mike.Lawton@sai-comm.com

March 29, 2013

Connecticut Siting Council

Subject: AT&T Wireless, SR1804 – Bethel CT04

Dear Connecticut Siting Council:

At the request of AT&T Wireless, SAI Communications has performed an assessment of the RF Power Density at the proposed site located at 64 Codfish Hill Road, Bethel, CT. Calculations were done in compliance with FCC OET Bulletin 65. This report provides an FCC compliance assessment based on a "worst-case" analysis that all transmitters are simultaneously operating at full power and pointing directly at the ground.

FCC OET Bulletin 65 formula:

$$S = \frac{2.56 * 1.64 * ERP}{4 * \pi * R^2}$$

Transmission Mode	Antenna Centerline AGL (ft)	Frequency (MHz)	Number of Channels	Effective Radiated Power per Channel (Watts)	Power Density (mW/cm ²)	Standard Limits (mW/cm ²)	% MPE (Uncontrolled/General Public)
AT&T UMTS	146	850	2	500.00	0.0169	0.5667	2.98%
AT&T UMTS	146	1900	2	500.00	0.0169	1	1.69%
AT&T LTE	146	700	1	500.00	0.0084	0.4667	1.81%
Total							6.47%

Conclusion: AT&T's proposed antenna installation is calculated to be within 6.47% of FCC Standard for General Public/Uncontrolled Maximum Permissible Exposure (MPE).

Sincerely,

Michael Lawton
SAI Communications

Preliminary ViewShed Report

CT 1155C / Bethel CT

64 Codfish Hill Rd.
Bethel, CT

EBI Project No. 61133025

Site Report Date: June 27, 2013



Prepared for:

Tarpon Towers, LLC
c/o Florida Tower Partners
401 N. Cattlemen Rd., Suite 305
Sarasota, FL, 34232

Prepared by:



EBI Consulting
environmental | engineering | due diligence.

June 27, 2013

Tarpon Towers, LLC
c/o Florida Tower Partners
401 N. Cattlemen Rd., Suite 305
Sarasota, FL, 34232

Subject: Preliminary Viewshed Assessment for proposed telecommunications installation
CT 1155C / Bethel CT
64 Codfish Hill Rd., Bethel, Fairfield County, CT 06801
EBI Project #61133025

EBI Consulting is preparing an environmental review on behalf of *Tarpon Towers, LLC* for the property noted above as part of its permit process and regulatory review by the FCC. The review is focused on NEPA compliance and includes an evaluation of whether historic properties or archeological sites may be affected by the telecommunications facilities proposed for the site under Section 106 of the NHPA.

On June 18, 2013, EBI Consulting conducted a Viewshed Assessment using a 3-foot diameter red weather balloon to simulate the proposed 150-foot monopole style telecommunications tower proposed to be constructed by Tarpon Towers, LLC.

At the time of the survey, the weather was partly cloudy and approximately 75° Fahrenheit. Wind speeds were approximately 3-6 miles per hour during the duration of the project. Photographs were taken from within the area of potential effect (APE) from various locations noted on the attached Photo location Map. Photographs are located within the Viewshed Report attached to this letter. Based on the results of the Viewshed Assessment, EBI determined that the tower would be visible the following locations: Bethel High School. The tower would not be visible from the other areas within the 2-mile radius. The attached viewshed maps are based on calculations assuming leaf-off conditions, so the visibility may change depending on the season.

Sincerely,

Amber Courselle
Architectural Historian
acourselle@ebiconsulting.com
Phone: 315-373-5016

Attachments: Photo Location Map
Photo Index
Viewshed Maps

PHOTO LOCATION MAP

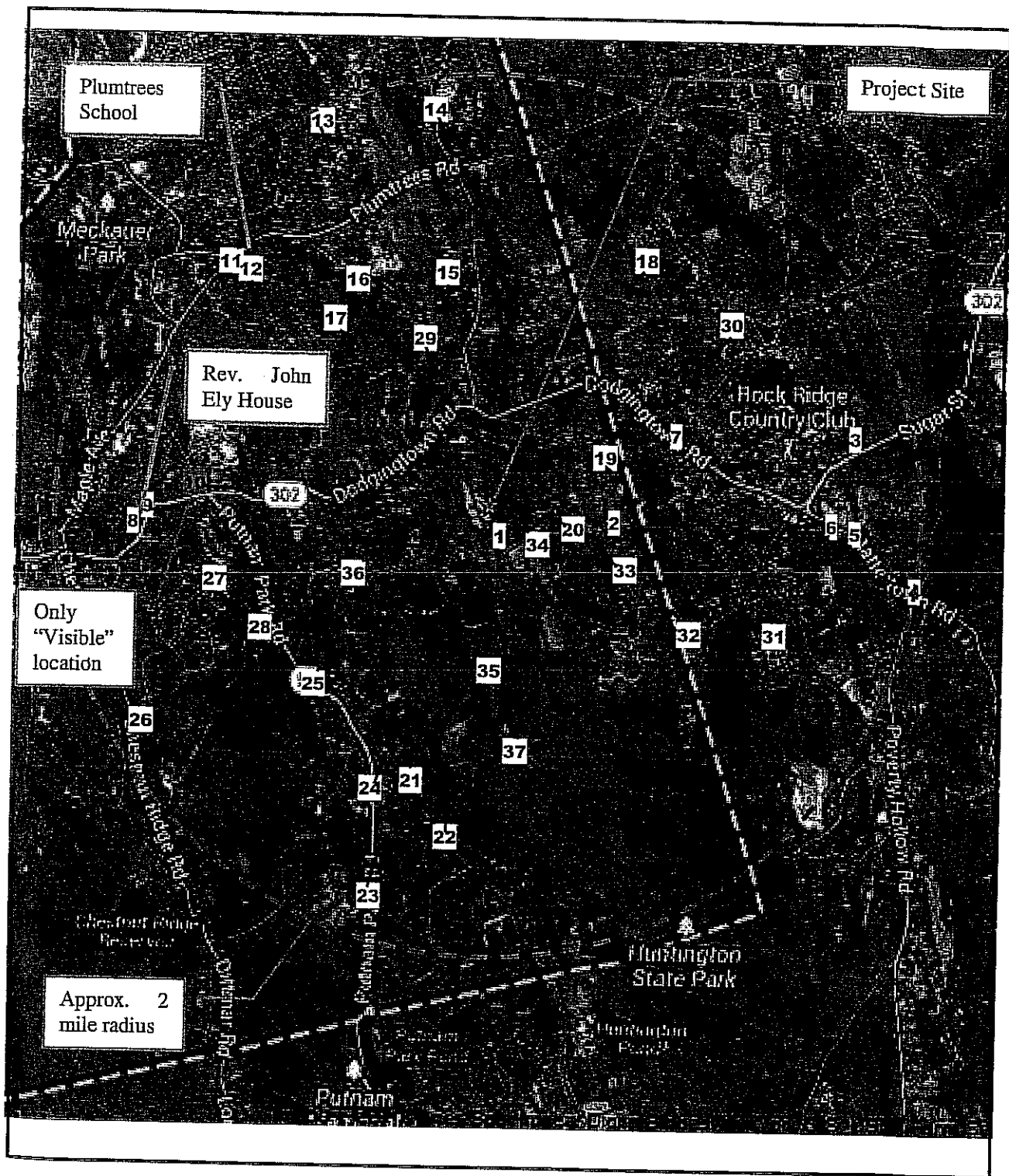


Photo Location Map

Arrow indicates the approximate location and direction in which the photograph was taken

PHOTOGRAPHS



1. Facing west toward Project Site from Twin Maple Drive. Balloons are not visible.



2. Facing west toward Project Site from Codfish Hill Rd. and Codfish Hill Rd. Ext. Balloons are not visible.



3. Facing west toward Project Site from Sugar Street. Balloons are not visible.



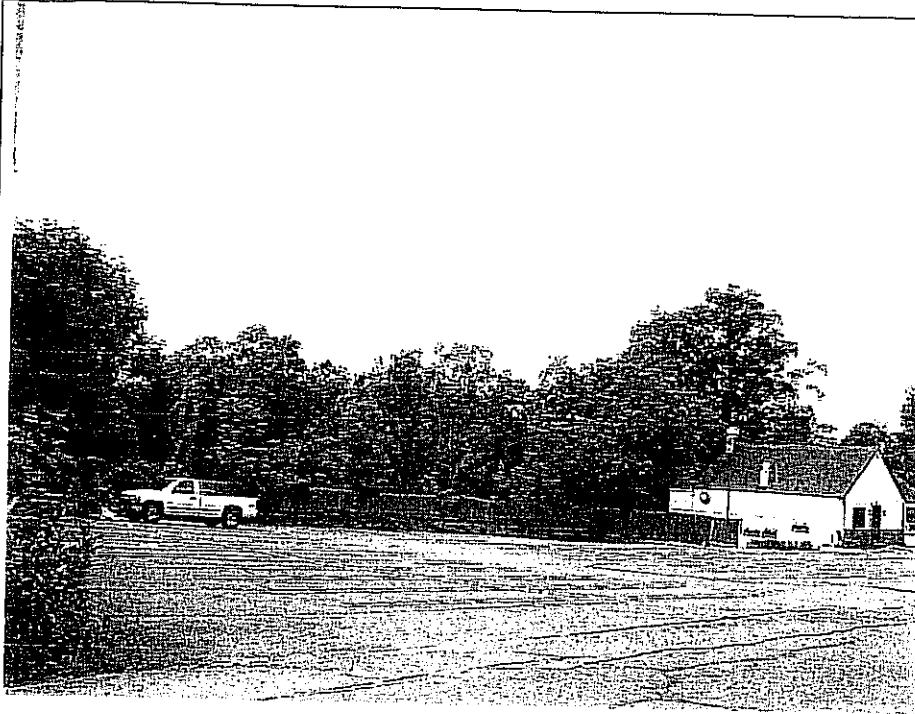
4. Facing west toward Project Site from Hattertown Rd. Balloons are not visible.



5. Facing west toward Project Site from Hattertown Rd. Balloons are not visible.



6. Facing west toward Project Site from Hattertown Rd. Balloons are not visible.



7. Facing west toward Project Site from Dodgingtown Rd. Balloons are not visible.



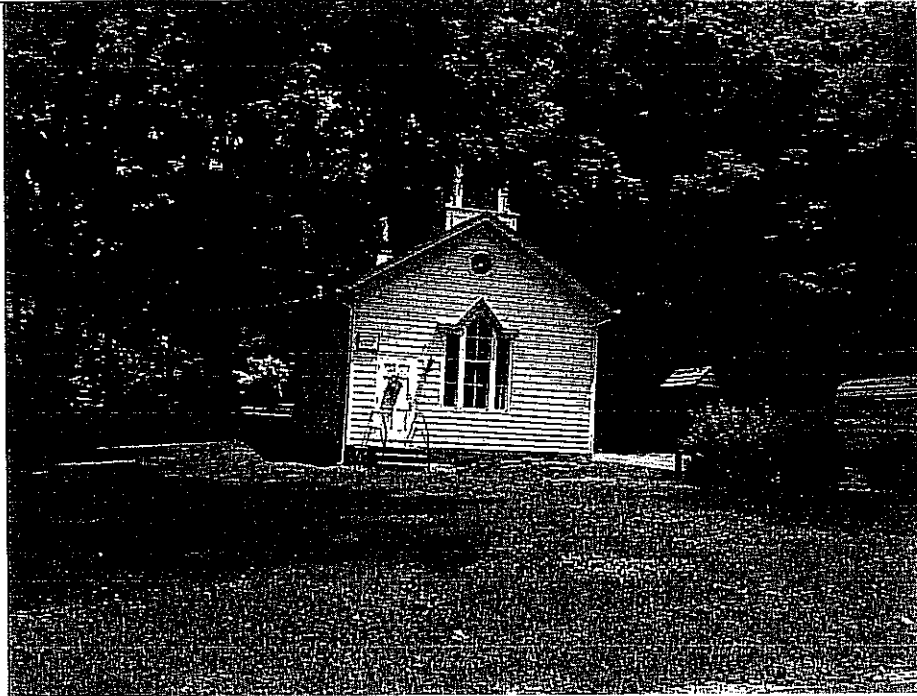
8. Facing northwest to the Rev. John Ely House



9. Facing east toward Project Site from the Rev. John Ely House. Balloons are not visible.



10. Facing east toward Project Site from Bethel High School, north of the intersection of Route 302 and Judd Ave. **Balloons are visible.**



11. Facing east to
Plumtrees
School



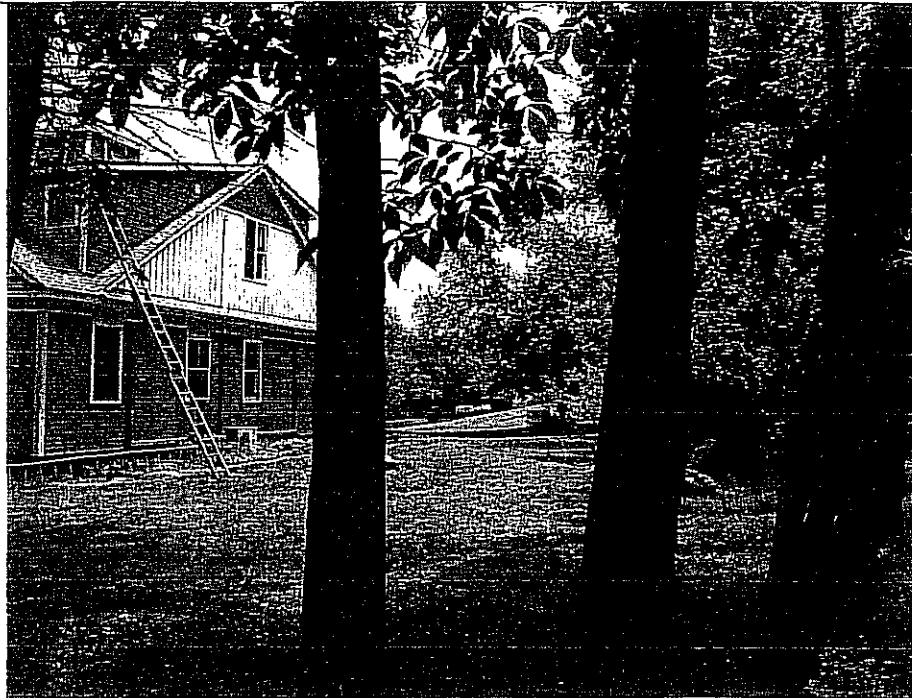
12. Facing southeast
toward Project
Site from
Plumtrees
School. Balloons
are not visible.



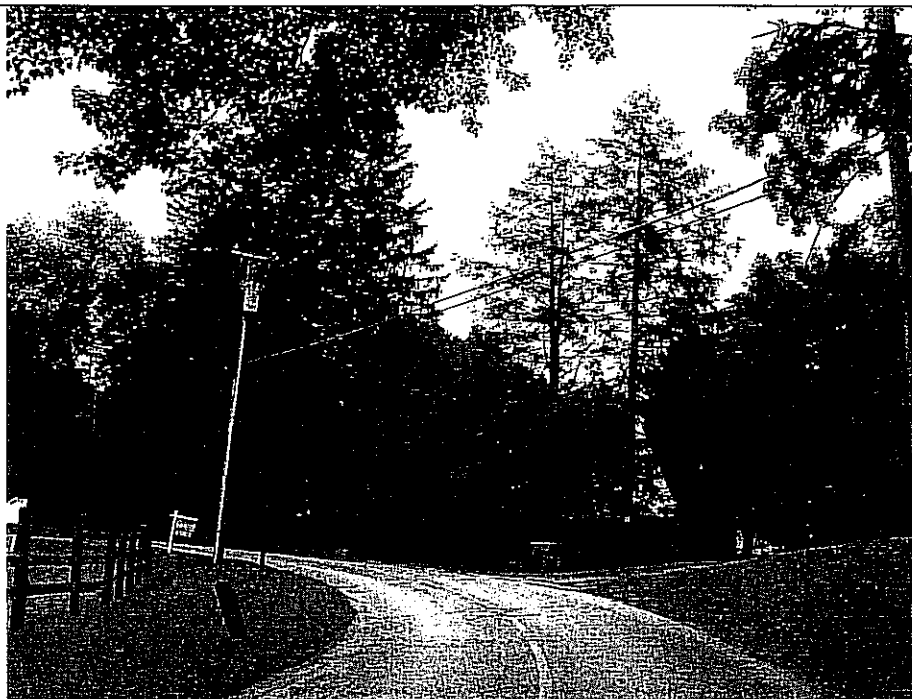
13. Facing southeast toward Project Site from Cortland Drive. Balloons are not visible.



14. Facing south toward Project Site from Old Hawleyville Road. Balloons are not visible.



15. Facing south
toward Project
Site from Old
Town Lane.
Balloons are not
visible.



16. Facing southeast
toward Project
Site from
Rockwell Road.
Balloons are not
visible.



17. Facing southeast
toward Project
Site from Linda
Lane. Balloons
are not visible.



18. Facing southwest
toward Project
Site from
Taunton Hill
Road. Balloons
are not visible.



19. Facing southwest
on Codfish Hill
Road



20. Facing northwest
toward Project
Site from
Codfish Hill
Road. Balloons
are not visible.



21. Facing northeast toward Project Site from Sunset Hill Road. Balloons are not visible.



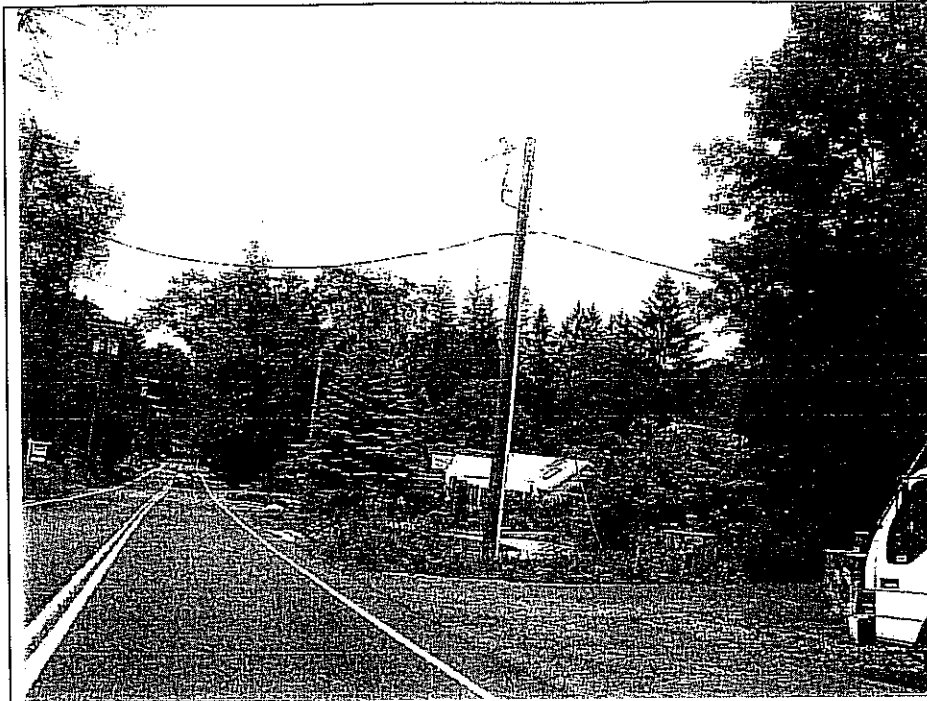
22. Facing north toward Project Site from Sunset Hill Road. Balloons are not visible.



23. Facing northeast toward Project Site from Route 58. Balloons are not visible.



24. Facing northeast toward Project Site from Route 58. Balloons are not visible.



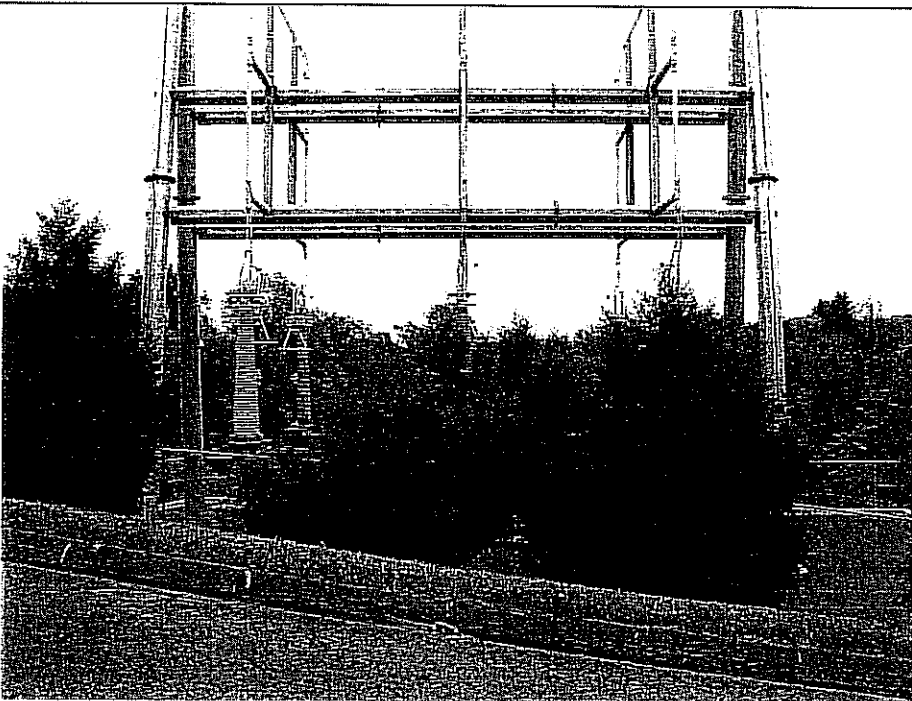
25. Facing northeast toward Project Site from Putnam Park Road. Balloons are not visible.



26. Facing northeast toward Project Site from Gretchen Road. Balloons are not visible.



27. Facing northeast toward Project Site from Hoyts Hill Road. Balloons are not visible.



28. Facing northeast toward Project Site from Hoyts Hill Road. Balloons are not visible.



29. VIA (32) Facing south toward Project Site from Shelley Rd. Balloons are not visible.



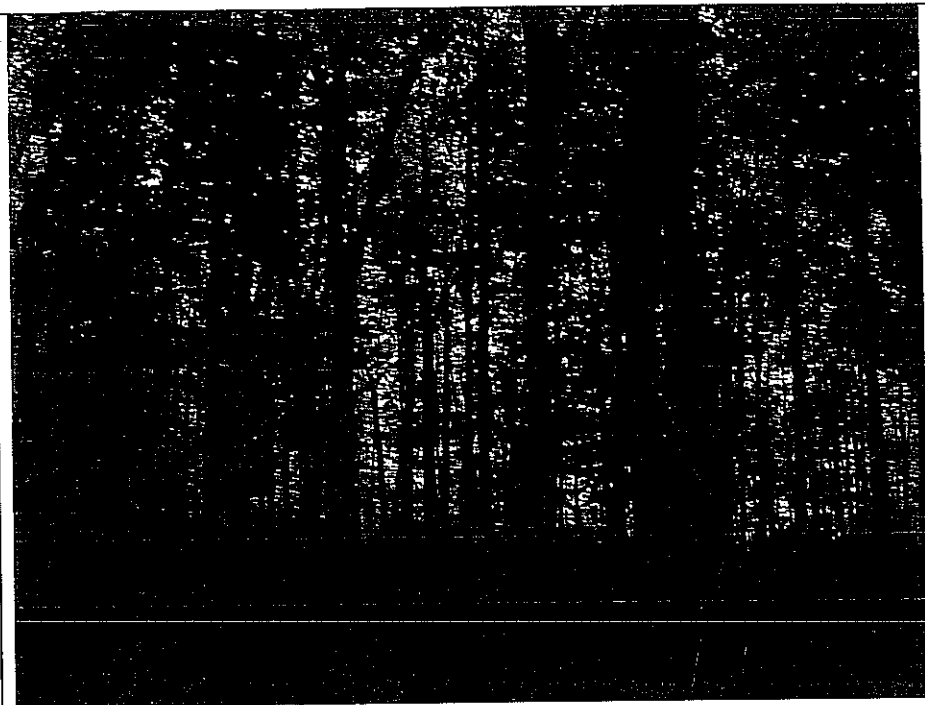
30. Facing southwest toward Project Site from Birch Hill Drive. Balloons are not visible.



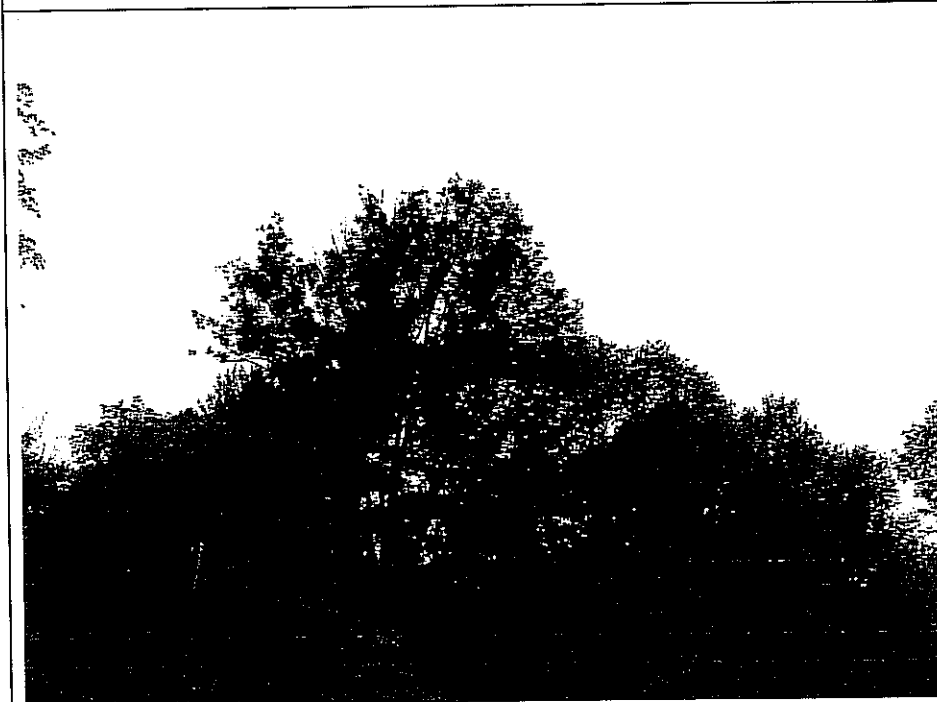
31. Facing northwest toward Project Site from Shut Road. Balloons are not visible.



32. Facing northwest toward Project Site from Old Dodgingtown Road. Balloons are not visible.



33. Facing northwest toward Project Site from Codfish Hill Rd. Ext. Balloons are not visible.



34. Facing northwest toward Project Site from Codfish Hill Road. Balloons are not visible.



35. Facing north toward Project Site from Legend Drive. Balloons are not visible.



36. Facing northeast toward Project Site from Codfish Hill Rd. Balloons are not visible.



37. Facing north
toward Project
Site from Aunt
Pattys Lane.
Balloons are not
visible.

Site type (choose one): <input checked="" type="checkbox"/> New Antenna Structure <input type="checkbox"/> Compound Expansion <input type="checkbox"/> Tower Replacement <input type="checkbox"/> Temporary Tower	Site ID: CT 1155C / Bethel CT	Site Address: 64 Codfish Hill Rd. Bethel, Fairfield County, CT
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NEPA Screening Checklist

Federal Communications Commission NEPA Category	Jurisdictional Agency	Check the appropriate boxes below	
		No Significant Impact	May Have Significant Impact
Designated Wilderness Areas	United States Fish & Wildlife Service; National Park Service; Forest Service; Bureau of Land Management	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Designated Wildlife Preserves	United States Fish & Wildlife Service	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Threatened or Endangered Species & Critical Habitats	United States Fish & Wildlife Service	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Historic Places *Pending SHPO consultation	Advisory Council on Historic Properties; State Historic Preservation Officer (SHPO)	<input type="checkbox"/> Note: No Historic Properties determination, pending SHPO consultation	<input type="checkbox"/>
Indian Religious Sites *Pending tribal consultation	Native American Indian Tribes; Bureau of Indian Affairs	<input type="checkbox"/> Note: Pending tribal consultation	<input type="checkbox"/>
Floodplain	Federal Emergency Management Agency (FEMA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Significant Changes to Surface Features (i.e. Wetlands fill, deforestation, or water diversion)	United States Army Corps of Engineers (ACOE)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

 Signature: Amber L. Courselle

 Company: EBI Consulting

 Print name: Amber Courselle

 Date: June 20, 2013